UNITED NATIONS

Framework Convention on Climate Change

Distr.
GENERAL

FCCC/SB/1999/8
28 September 1999

Original: ENGLISH

SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE
Eleventh session
Bonn, 25 October - 5 November 1999
Item 6 of the provisional agenda

SUBSIDIARY BODY FOR IMPLEMENTATION
Eleventh session
Bonn, 25 October - 5 November 1999
Item 6 of the provisional agenda

MECHANISMS PURSUANT TO ARTICLES 6, 12 AND 17 OF THE KYOTO PROTOCOL

Synthesis of proposals by Parties on principles, modalities, rules and guidelines

Note by the Chairmen

CONTENTS

		Paragraphs	Page
Introduction		1 - 18	5
A.	Mandate	1 - 3	5
B.	Scope of the note	4 - 6	5
C.	Approach	7 - 16	6
D.	Possible action by the SBSTA and the SBI	17 - 18	7

GE.99-66129

		Paragraphs	Page
PART ONE: DEFINITIONS AND ABBREVIATIONS		19 - 23	8
PART TWO: ARTICLE 6 PROJECTS		24 - 60	11
I.	NATURE AND SCOPE	24 - 33	11
A.	Purpose	24 - 25	11
B.	Principles	26	11
C.	Supplementarity	27 - 28	12
D.	Participation	29 - 32	13
E.	Share of proceeds	33	14
II.	METHODOLOGICAL AND OPERATIONAL ISSUES	34 - 55	14
A.	Project approval/validation	34 - 37	14
B.	Project monitoring	38	16
C.	Project verification	39 - 40	16
D.	Certification/issuance of ERUs	41 - 43	16
E.	Issues related to compliance	44 - 45	17
F.	Registries	46 - 51	18
G.	Reporting by Parties	52 - 55	18
III.	INSTITUTIONAL ISSUES	56 - 60	19
Appendices to Part Two			21
A.	Baselines		21
B.	Monitoring, reporting, verification and certification/issuance of ERUs		21
C.	Registries		21

		Paragraphs	Page
PART THREE: CLEAN DEVELOPMENT MECHANISM		61 - 146	22
I.	NATURE AND SCOPE	61 - 78	22
A.	Purpose	61 - 62	22
B.	Principles	63	22
C.	"Part of"/supplementarity	64	23
D.	Participation	65 - 73	24
E.	Share of proceeds	74 - 78	26
II.	METHODOLOGICAL AND OPERATIONAL ISSUES	79 - 125	27
A.	Project validation/registration	79 - 94	27
B.	Project financing	95 - 100	31
C.	Project monitoring	101 - 103	32
D.	Project verification	104 - 106	32
E.	Certification/issuance of CERs	107 - 113	33
F.	Issues related to compliance	114 - 116	35
G.	Adaptation assistance	117 - 122	35
H.	Registries	123	36
I.	Reporting by Parties	124 - 125	36
III.	INSTITUTIONAL ISSUES	126 - 146	37
A.	Role of the COP/MOP	126 - 129	37
B.	Executive board	130 - 137	38
C.	Operational entities	138 - 140	41
D.	Parties	141 - 142	42
E.	Administrative support	143 - 145	43
F.	Review	146	43
Appendices to Part Three			45
A.	Baselines		45
B.	Validation/registration		45
C.	Monitoring, reporting, verification and certification/issuance of CERs		45
D.	Registries		45
E.	Procedures for the operation of the executive board		45
F.	Guidelines for operational entities		45
G.	Disbursement of the share of proceeds		45
H.	Adaptation		45

		Paragraphs	Page
PART FOUR: EMISSIONS TRADING		147 - 185	46
I.	NATURE AND SCOPE	147 - 157	46
A.	Purpose	147 - 148	46
B.	Principles	149	46
C.	Supplementarity	150 - 151	47
D.	Participation	152 - 156	48
E.	Share of proceeds	157	50
II.	METHODOLOGICAL AND OPERATIONAL ISSUES	158 - 177	50
A.	Modalities of operation	158 - 161	50
B.	Verification	162 - 164	51
C.	Issues related to compliance	165 - 169	52
D.	Registries	170 - 175	53
E.	Reporting by Parties	176 - 177	54
III.	INSTITUTIONAL ISSUES	178 - 185	55
A.	Role of the COP and/or the COP/MOP	178 - 180	55
B.	Parties	181	55
C.	Administrative support	182 - 183	56
D.	Review	184 - 185	56
Appendices to Part Four			57
A.	National systems		57
B.	Reporting		57
C.	Registries		57

Annexes

I.	Article 6 of the Kyoto Protocol	58
II.	Article 12 of the Kyoto Protocol	59
III.	Article 17 of the Kyoto Protocol	61
IV.	Code of sources	62

Introduction

A. Mandate

1. The Conference of the Parties (COP), at its fourth session, by its decision 7/CP.4, adopted a work programme on the mechanisms under Articles 6, 12 and 17 of the Kyoto Protocol with a view to taking decisions at its sixth session, including, where appropriate, recommendations to the Conference of the Parties serving as the meeting of the Parties to the Protocol (COP/MOP), at its first session, on principles, modalities, rules and guidelines (FCCC/CP/1998/16/Add.1).

2. The Subsidiary Body for Scientific and Technological Advice (SBSTA) and the Subsidiary Body for Implementation (SBI), at their tenth sessions, having considered the first synthesis of proposals on the mechanisms, invited Parties to submit further proposals, by 31 July 1999, on issues raised in decision 7/CP.4, paragraph 1 (FCCC/SBSTA/1999/6). They also requested the Chairmen to prepare, with the assistance of the secretariat, a revised and consolidated synthesis of proposals, identified by sources, for consideration at their eleventh sessions. This synthesis of proposals was to take into account decision 7/CP.4, views by Parties on the first synthesis of proposals at the tenth session of the subsidiary bodies, and further proposals by Parties.

3. Submissions received prior to and during the tenth sessions of the subsidiary bodies are contained in document FCCC/SB/1999/MISC.3 and its addenda. Further proposals are contained in document FCCC/SB/1999/MISC.10. Later proposals, which could not be taken into account in this document, are contained in document FCCC/SB/1999/MISC.10/Add.1.

B. Scope of the note

4. This note by the Chairmen responds to the above request. There are four parts and four annexes to this document. The first part presents a synthesis of definitions and abbreviations which are used throughout this document. The subsequent three parts contain syntheses of proposals by Parties on the principles, modalities, rules and guidelines, as appropriate, for each of the mechanisms under Article 6 (referred to by some Parties as "joint implementation" (JI)), Article 12 (the clean development mechanism (CDM)) and Article 17 (emissions trading) of the Kyoto Protocol.

5. Throughout the document, references are made to issues being addressed in other areas of work. Parties may wish, in particular, to consider this document in the light of SBSTA and SBI provisional agenda item 4 (Procedures and mechanisms relating to compliance under the Kyoto Protocol), item 5 (Activities implemented jointly under the pilot phase) and item 7 (Capacity-building) and SBSTA provisional agenda item 8 (b) (National systems, adjustments and guidelines under Articles 5, 7 and 8 of the Kyoto Protocol) and item 9 (a) (Land-use, land-use change and forestry).

6. The subsidiary bodies, also at their tenth sessions, requested the secretariat to prepare a revised plan for facilitating capacity-building related to the mechanisms. The proposed revised plan is contained in document FCCC/SB/1999/6, to be considered under item 7 (capacity-building) of the SBSTA and SBI provisional agendas. Views by Parties on capacity-building are reflected in that document and not in this note. Proposals by Parties in relation to capacity-building are contained in documents FCCC/SB/1999/MISC.9 and FCCC/SB/1999/MISC.11.

C. Approach

7. As requested by the subsidiary bodies at their tenth sessions, a revised and consolidated synthesis of proposals has been elaborated. In light of suggestions made by the Parties during those sessions on structure, parts two to four of this document address three major areas for each mechanism:

- nature and scope;
- methodological and operational issues; and
- institutional issues.

8. "Nature and scope" addresses, *inter alia*, the purpose, principles and scope of each mechanism. Elements contained in the general part of the annex to decision 7/CP.4 are reflected mostly in this section, without prejudging the commonality or otherwise of these issues.

9. "Methodological and operational issues" addresses issues such as the validation, monitoring, verification and certification of project activities, as well as registries and reporting.

10. "Institutional issues" refers, *inter alia*, to the role of the COP and the COP/MOP, the CDM executive board, operational and other entities, and review procedures, as appropriate.

11. This document does not contain substantive inputs to the appendices foreseen for each of the mechanisms. Such appendices may be useful for addressing technical issues, such as the design of baselines and the determination of additionality under Articles 6 and 12, and registries.

12. The proposals by Parties are allocated to elements within the structure for each mechanism. The text has been synthesized where convergence between Parties' views seems apparent. Diverging positions are represented with bracketed text or, when necessary, with alternative paragraph options. While every effort was made to reflect the substance of Parties' proposals, editorial changes were made where they appeared warranted.

13. The sources of proposals are identified by a code using superscript numbers, in accordance with the list contained in annex 4 to this document. Where a Party proposed the general substance of the full sentence, numbers were put at the end of those sentences. Where a

Party proposed the substance of a part of a sentence, numbers follow the relevant clauses or brackets. This also applies to text from the Kyoto Protocol and to proposals by the Chairmen.

14. In parts two and four, on Article 6 projects and emissions trading respectively, proposals to address supplementarity have been divided into proposals to limit acquisitions and proposals to limit transfers. This was done to facilitate the comparison of proposals. In part three on the CDM, only proposals to limit acquisitions are presented.

15. In a number of areas no substantive proposals were received. This applies, *inter alia*, to issues related to compliance, including any implications of a Party being a member of an agreement under Article 4 and any need to avoid inconsistency between rules on the mechanisms and those of the World Trade Organization.

16. Proposals by Parties relating to timing and procedural issues in regard to the work programme on mechanisms are not addressed in this document. Parties are instead referred to documents FCCC/SB/1999/MISC.3 and FCCC/SB/1999/MISC.10 and their addenda.

D. Possible action by the SBSTA and the SBI

17. The subsidiary bodies may wish to recommend to the Conference of the Parties that it take note of this document and

(a) Request the Chairmen of the subsidiary bodies to prepare, on its basis and taking into account the views expressed by Parties at the eleventh session of the subsidiary bodies and the fifth session of the Conference of the Parties, as well as further views submitted by Parties by 31 January 2000, a draft negotiating text on the principles, modalities, rules and guidelines for the mechanisms for consideration at the twelfth sessions of the subsidiary bodies;

(b) Invite Parties to make further proposals, in particular on issues related to the appendices for each mechanism, to be issued as a miscellaneous document; and

(c) Request the secretariat to support the Chairmen of the subsidiary bodies in preparing the draft negotiating text and to organize, in this context, a workshop on mechanisms to be held in March/April 2000, provided sufficient funding for this purpose is available in a timely manner.

18. The subsidiary bodies may further wish to recommend to the Conference of the Parties, at its fifth session, that it provide further guidance to the Chairmen on how to proceed with the work programme on mechanisms under decision 7/CP.4, to be undertaken with priority given to the clean development mechanism, including the development of appendices, with a view to decisions being taken on all the mechanisms under Articles 6, 12 and 17 of the Kyoto Protocol at the sixth session of the COP, including, where appropriate, recommendations to the COP/MOP at its first session.

PART ONE

DEFINITIONS AND ABBREVIATIONS

19. For the purposes of this [rule] [annex], the definitions contained in Article 1 of the United Nations Framework Convention on Climate Change (Convention) and Article 1 of the Kyoto Protocol to the Convention on Climate Change (Protocol) shall apply[2].

20. In addition, in relation to the Convention and the Protocol[2]:

(a) 'Article' means an Article of the Protocol, unless otherwise indicated[4].

(b) 'Assigned amount' for each Party included in Annex I is that amount defined in Article 3, paragraph 7, and Annex B to the Protocol[2].

(c) A 'clean development mechanism' (CDM) is defined in Article 12[1,4].

(d) 'COP' refers to the Conference of the Parties to the Convention[2].

(e) 'COP/MOP' refers to the Conference of the Parties serving as the meeting of the Parties to the Protocol[4].

(f) 'Mechanism' refers to instruments established under Articles 6, 12 and 17[2].

21. In addition, in relation to actors[2]:

(a) 'Executive board' refers to the entity supervising the CDM[2].

(b) [An 'independent entity' ...[10]][2]

(c) 'Legal entities' are those entities referred to in Article 6, paragraph 3[2].

(d) An 'operational entity' is a public or private entity [designated by the COP/MOP[1]] [accredited by the executive board[4]] to [validate[10]] [register[4]] [present[12]] CDM project activities, certify reductions in emissions by sources [and/or enhancements of removals by sinks[4]], and undertake other responsibilities as specified[4].

(e) ['Participant'[4]] ['Proponent'[2]] means a Party, a private or public entity resident in a Party, or both, that has entered into a contractual agreement [on[4]] [to implement[2]] a CDM project activity[4].

(f) 'Private and/or public entities' are those entities referred to in Article 12, paragraph 9[2].

22. In addition, in relation to units[2]:

(a) An 'emission reduction unit' (ERU) shall be equal to one metric ton of CO_2 equivalent emissions [reduced or sequestered[24]] arising from an Article 6 project, calculated using the global warming potentials (GWPs) defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5[4,10,24]. Each ERU shall have a unique serial number from which it will be possible to determine the Party of origin, the project, the year of [issuance[4]] [certification[10]], [and the certifying entity[10]], [and shall be trackable through the registry system[4]][4,10,18].

(b) A 'certified emission reduction' (CER) unit shall be equal to one metric ton of CO_2 equivalent emissions [reduced or sequestered[24]] arising from a CDM project, calculated using the GWPs defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5[4,10,24]. Each CER shall have a unique serial number from which it will be possible to determine the Party of origin, the project, the year of [issuance[4]] [certification[10]], [and the certifying entity[10,4]], [and shall be trackable through the registry system[4]][4,10,18].

(c) An 'assigned amount unit' (AAU) shall be equal to one metric ton of carbon dioxide (CO_2) equivalent emissions calculated using the GWPs defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5[4,10,19,24]. Each AAU shall have a unique serial number from which it will be possible to determine the Party of origin and the commitment period for which the unit was issued [and shall be trackable through the registry system[4]][4,10].

(d) Excess AAUs are those AAUs that have been certified and can be transferred or acquired under Article 17[24].

23. In addition, in relation to functions[2]:

(a) 'Certification' is the binding assessment by an independent or operational entity upon request of a project participant of how many additional, real, measurable and long-term emission reductions have resulted from a validated project activity[10].

(b) ['Issuance' of CERs is the function assumed by the executive board on the basis of verification reports[24].]

(c) Option 1: 'Validation' is the binding assessment by an independent or operational entity, upon request of a project participant, that a specific project activity under Articles 6 or 12 meets the requirements laid down in the rules in the Protocol and in the Convention[10].

Option 2: '[Validation[10]] [registration[4]] [presentation[12]]' is the process by which a project is approved according to the purposes and eligibility criteria of the CDM[2].

(d) Option 1: 'Verification' is the periodic assessment of emission reductions from a project[2].

Option 2: 'Verification' refers to the review of [inventories,] [registries,] [reporting,] [systems] [and projects] to ensure integrity in the use of the mechanisms[2].

PART TWO

ARTICLE 6 PROJECTS

I. NATURE AND SCOPE

A. Purpose

24. "For the purpose of meeting its commitments under Article 3, any Party included in Annex I may transfer to, or acquire from, any other such Party emission reduction units resulting from projects aimed at reducing anthropogenic emissions by sources or enhancing anthropogenic removals by sinks of greenhouse gases in any sector of the economy, provided that:

(a) Any such project has the approval of the Parties involved;

(b) Any such project provides a reduction in emissions by sources, or an enhancement of removals by sinks, that is additional to any that would otherwise occur;

(c) It does not acquire any emission reduction units if it is not in compliance with its obligations under Articles 5 and 7;

(d) The acquisition of emission reduction units shall be supplemental to domestic actions for the purposes of meeting commitments under Article 3."[1]

25. Any emission reduction units [from a verified joint implementation project[10]] which a Party acquires from another Party in accordance with the provisions of Article 6 shall be added to the assigned amount for the acquiring Party[10,11]. Any emission reduction units [from a verified joint implementation project[10]] which a Party transfers to another Party in accordance with the provisions of Article 6 shall be subtracted from the assigned amount for the transferring Party[10,11].

B. Principles

26. In their actions to achieve the purpose of Article 6, the Parties shall be guided, *inter alia*, by:

(a) Article 3 of the Convention[11];

(b) Equity[3,13] between developed and developing country Parties[13], including equity with respect to per capita greenhouse gas emissions[13], so as to not perpetuate existing inequities between Parties included in Annex I and developing country Parties[13];

(c) Climate change effectiveness (i.e. real, measurable and long-term benefits related to mitigation of climate change are to be achieved)[10,11,13];

(d) Transparency[11];

(e) Cost-effectiveness (i.e. global benefits are to be achieved at the lowest cost)[4,10];

(f) Additionality in accordance with Article 6, paragraph 1 (b)[2];

(g) Option 1: The concept of 'fungibility' among the three mechanisms of the Protocol is totally unacceptable[6].

Option 2: Acquired AAUs, ERUs and CERs can be used to fulfil a Party's own obligations or be the object of further trade[18].

C. Supplementarity

Limits on acquisitions

27. Option 1: Acquisitions of ERUs resulting from projects initiated under Article 6 shall be supplemental to domestic actions for the purpose of meeting a Party's quantified emission limitation and reduction commitments under Article 3[14,21,22].

Option 2: Net acquisitions by a Party included in Annex I for all three mechanisms together must not exceed the higher of the following alternatives:

(a) 5 per cent of: $\frac{\text{its base year emissions multiplied by 5 plus its assigned amount}}{2}$

(where 'base year emissions' may be replaced by 'average annual emissions in the base period, as provided for in Article 3, paragraph 5')[10];

(b) 50 per cent of: the difference between its annual actual emissions in any year of the period from 1994 to 2002, multiplied by 5, and its assigned amount[10].

However, the ceiling on net acquisitions can be increased to the extent that a Party included in Annex I achieves emission reductions larger than the relevant ceiling in the commitment period through domestic action undertaken after 1993, if demonstrated by the Party in a verifiable manner and subject to the expert review process to be developed under Article 8[10].

Option 3: The overall 'cap' on the use of the three mechanisms should not exceed 25-30 per cent as a maximum[20].

Option 4: No determination of the term "supplemental"[4].

Limits on transfers

28. Option 1: Net transfers by a Party included in Annex I for all three mechanisms together must not exceed:

5 per cent of: $\frac{\text{its base year emissions multiplied by 5 plus its assigned amount}}{2}$

(where 'base year emissions' may be replaced by 'average annual emissions in the base period, as provided for in Article 3, paragraph 5')[10].

However, the ceiling on net transfers can be increased to the extent that a Party included in Annex I achieves emission reductions larger than the relevant ceiling in the commitment period through domestic action undertaken after 1993, if demonstrated by the Party in a verifiable manner and subject to the expert review process to be developed under Article 8[10].

Option 2: The overall 'cap' on the use of the three mechanisms should not exceed 25-30 per cent as a maximum[20].

Option 3: No determination of the term "supplemental"[4].

D. Participation

29. Option 1: A Party included in Annex I that does not:

(a) Comply with its obligations under Articles 5 and 7 may not acquire any ERUs resulting from projects under Article 6[4];

(b) Maintain a national registry in accordance with the provisions of these guidelines may not transfer or acquire ERUs resulting from projects under Article 6[4].

Option 2: Parties included in Annex I shall only transfer or acquire ERUs from a project under Article 6, if they:

(a) Have ratified the Protocol[10];

(b) Are bound by a compliance regime adopted by the COP/MOP[10];

(c) Have not been excluded from participation in Article 6 according to the procedures and mechanisms under the compliance regime[10];

(d) Are in compliance with their commitments under Article 12 of the Convention[10];

(e) Comply with Articles 2, 3, 5, 7 and 10[15];

(f) Have in place a national policy for emission reduction and sink enhancement and have developed scenarios for emission reduction on both national and project scales[18].

30. Legal entities [resident in a Party included in Annex I[4]] can participate in Article 6 with the approval of the Parties involved in such projects[10]. Participation of legal entities in Article 6 projects does not affect the responsibility of Parties included in Annex I for the fulfilment of their commitments under the Protocol[4,10,18].

31. A Party included in Annex I may develop rules or guidance for the participation of that Party, and of legal entities resident in that Party, in projects under Article 6[4,18]. [resulting from specific economic and social conditions of the country in question[18]].

32. If a Party's consistency with the requirements in the above paragraph is called into question [by the review process under Article 8[2]] [by other means[4]], the issue will be expeditiously resolved [through a general procedure applicable to the Protocol[4]] [through a specialized procedure[4]][4].

(Note: The brackets in the above paragraph were submitted by Parties as options.)

E. Share of proceeds

33. A share of proceeds shall be used to cover administrative expenses as well as to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation[3,5,7,8,17,21,25,26]. The share of proceeds to assist in meeting adaptation costs shall be the same as for the provisions in Article 12, paragraph 8[7].

II. METHODOLOGICAL AND OPERATIONAL ISSUES

A. Project approval/validation

34. A project under Article 6 shall:

(a) Provide a reduction in emissions of one or more gases listed in Annex A of the Protocol by sources listed in Annex A of the Protocol, or an enhancement of removals by sinks, that is additional to any that would otherwise occur[4,18]. Enhancement of removals by sinks covers activities included in Article 3, paragraph 3, and any additional activities under Article 3, paragraph 4[4];

(b) Cover, as a priority, the sectors of combustion, industry, energy raw material processing and transportation, transport and municipal management[18].

35. Option 1: A project under Article 6 shall be approved by the Parties involved[4]. A Party may develop its own internal mechanisms and criteria for project approval based on its domestic circumstances[4].

Option 2: Independent entities shall validate the project upon request of a project participant[10]. A project needs to be validated before emission reductions resulting from that project may be certified[10]. A project shall be validated only if it meets the following requirements:

(a) The project has the approval of the Parties involved[10,18,24], as indicated in statements of project approval submitted to the secretariat[24];

(b) All legal entities authorized under Article 6, paragraph 3, which are involved in the project shall demonstrate that they are entitled to participate in Article 6 projects[10];

(c) An [agreed[24]] baseline for the project shall be determined[10,24] and submitted to the independent entity by the project participants[10], in accordance with Appendix A[10,24]. The environmental additionality of the project shall be calculated on the basis of this baseline[10]. It must be demonstrated that the emission reductions from the project are real, measurable and long-term and that the emissions occurring with the project are lower than the emissions that would have occurred in the absence of the project[10].

(d) A monitoring protocol shall be approved by the Parties involved[24] containing information on procedures for accurate, systematic and periodic monitoring of the project in accordance with Appendix B[10]. This shall be provided to the independent entity[10].

Independent entities shall publish their decisions on the validation of projects in a suitable manner[10]. Such entities shall be institutionally and economically independent from, and not entitled to participate in, the identification, development or financing of Article 6 projects[10].

36. A project under the activities implemented jointly (AIJ) pilot phase will be eligible to be pursued as a project under Article 6 if the project meets the criteria established in these guidelines, and if the Parties involved in the project agree that it should be considered as an Article 6 project[4].

37. Implementation of projects provided for in Article 6 should be commenced at the same time as CDM projects, on completion of the AIJ pilot phase but no later than after the first session of the COP/MOP[18].

B. Project monitoring

38. The reporting process under Article 6 should be based on guidelines developed by the Convention bodies and as adopted by the COP[18]. This system should be based on existing guidelines for AIJ under the pilot phase[18]. Monitoring should cover not only emissions but also the cost-effectiveness of the project[18]. The provision and installation of measuring equipment should be envisaged during the project preparatory phase[18]. Monitoring must include also technical aspects (compliance between implemented and designed technology, etc.)[18].

C. Project verification

39. Periodic reviews of project implementation should be carried out by expert teams appointed by the COP[18].

40. Verification should be carried out on two levels by[18]:

(a) The donor and recipient country[18];

(b) The COP/MOP, or by a body established by the COP/MOP, in order to verify all of the mechanisms[18].

D. Certification/issuance of ERUs

41. Option 1: The Party in which the project site is located shall issue ERUs and transfer them to Parties and/or entities participating in the project[4]. ERUs shall be distributed among the project participants according to their agreement[4].

Option 2: Certification and verification should be carried out at the international level by the same independent authority which is to perform this within the CDM mechanism, whereas at the national level this should be done by a non-governmental organization[18].

Option 3: Independent entities shall certify the emission reductions resulting from a validated project upon request of a project participant[10]. Additional emission reductions resulting from a project shall be calculated on the basis of the baseline submitted to the independent entity in the course of the validation of the project[10]. They shall be certified after they have occurred, only if:

(a) A participant in the project applies for the certification of the emission reductions resulting from the project during a specific period of time[10];

(b) The project has been validated and continues to meet the requirements for project validation[10];

(c) All Parties involved are entitled to participate in Article 6 projects[10];

(d) The applicant submits the necessary monitored data proving that:

(i) The project has resulted in additional emission reductions by sources, or an additional enhancement of removals by sinks[10];

(ii) These emission reductions or enhancements of removals by sinks are real, measurable and long-term[10].

Independent entities shall inform the applicant of their decision in writing immediately after the completion of the certification process[10]. Independent entities shall publish their decisions on the certification of emission reductions in a suitable manner[10]. Such entities shall be institutionally and economically independent from, and not entitled to participate in, the identification, development or financing of Article 6 projects[10].

42. Issued certificates shall contain the following information and data:

(a) The project and the project participants, including the Parties involved[10];

(b) The number of ERUs that have resulted from the project and their serial numbers[10].

43. Monitoring data reported to the secretariat must demonstrate the environmental additionality of the project, which is indicated when actual emissions associated with the project are less than the emissions determined for its baseline[24].

E. Issues related to compliance

44. Option 1: If a question of implementation by a Party included in Annex I of the requirements referred to in Article 6 is identified in accordance with the relevant provisions of Article 8, transfers and acquisitions of emission reduction units may continue to be made after the question has been identified, provided that any such units may not be used by a Party to meet its commitments under Article 3 until any issue of compliance is resolved[1]. Such a question shall be expeditiously resolved [through a general procedure applicable to the Protocol[4]] [through a specialized procedure[4]][4].

(Note: The brackets in the above paragraph were submitted by the Parties as options.)

Option 2: Any Party that is not in compliance with Article 6 may only transfer ERUs from a given project if the design of the project, including the definition of the baseline, has been validated and the ERUs generated have been certified by an independent third party in accordance with any guidelines issued by the COP/MOP[24].

45. A Party operating under Article 4 [may[4]] [may not[4]] acquire any ERUs resulting from projects under Article 6 if another Party operating under the same Article 4 agreement, or if a regional economic integration organization to which the Party belongs and which is itself a Party to the Protocol, is found not to be in compliance with its obligations under Articles 5 and 7[4].

(Note: The matter in the above paragraph was raised by the Parties as an issue to be addressed, but not as a proposal.)

F. Registries

46. Option 1: Any Party participating in Article 6 project activities shall establish and maintain a national registry which accurately records all holdings, transfers, acquisitions and retirements of ERUs by the Party and its authorized legal entities[4].

Option 2: A central registry shall be established with the aim of tracking the generation, transfer and retirement of AAUs, CERs and ERUs transferred under the Protocol mechanisms[3].

47. Transfers and acquisitions of ERUs shall be made by removing units (identified by serial number) from the registry of the transferring Party and adding them to the registry of the acquiring Party[4].

48. ERUs transferred or acquired during the period from the year 2000 up to the beginning of the first commitment period shall be accounted for according to Article 3, paragraphs 10 and 11 respectively[24].

49. ERUs used by a Party toward meeting its commitment under Article 3, paragraph 1, shall be retired by that Party, in which case such units may not be further used or transferred. A record of all retired ERUs (identified by serial number) shall be kept by the Party in its registry[4].

50. Information maintained in a national registry shall be publicly accessible[4].

51. Any two or more Parties may voluntarily maintain their registries in a consolidated system, within which each registry would remain legally distinct[4].

G. Reporting by Parties

52. Parties included in Annex I shall report annually on their projects under Article 6 within the framework of their reporting commitments under [Article 7, paragraphs 1 and 2[4,10,24]] [Article 6[4]].

53. Reporting under [Article 7, paragraph 1[4,24]] [Article 6[4]] will include information, in a standard format, on transfers and acquisitions of ERUs during that year, including, for each unit, its unique serial number and the name of the Party to whose registry it was transferred or from

which it was acquired[4,24]. Transfers involving legal entities must also provide information on entities involved in the transaction[24].

54. Reporting on these projects under Article 7, paragraph 2, shall be in accordance with the uniform reporting format, which shall be an integral part of the guidelines developed under Article 7, paragraph 4[24].

55. Information related to projects undertaken under Article 6 and reported under Article 7 [will be subject to the expert review process under Article 8[24]] [reviewed in accordance with Article 6/8 and its guidelines and made public by the secretariat[4]]. Should a question of implementation by a Party included in Annex I and engaged in a project under Article 6 arise in the context of the expert review process, Article 6, paragraph 4, will apply[24].

III. INSTITUTIONAL ISSUES

56. The COP/MOP shall:

(a) Serve as the supreme body of the global framework established under the Protocol[3];

(b) Define the roles of verification and auditing entities, including private sector entities[22];

(c) Issue guidelines for reporting by Parties on projects under Article 6[24];

(d) Issue guidelines for the certification of ERUs by an independent third party for cases where a Party is not in compliance with Article 6 but wishes to transfer ERUs from a validated project[24];

(e) Issue guidelines for comparable methodologies for baseline determination[24];

(f) Acknowledge the compliance of a Party with the Protocol, in particular the obligations provided by Articles 3, 5, 7 and 10[18];

(g) Approve the results of an Article 6 project before credits can be transferred[18].

57. The COP/MOP shall review the guidelines governing the joint implementation, with the first review to be carried out no later than the year 2012[10]. Further reviews shall be carried out periodically thereafter[10]. Any revision of guidelines shall take effect in the commitment periods subsequent to that of their adoption.[10]

58. [Independent entities[10]] [operating authorities[18]] shall:

(a) Be institutionally and economically independent from, and not entitled to participate in, the identification, development or financing of Article 6 projects[10];

(b) [Validate[10]] [approve[18]] a project under Article 6 upon request of a project participant and verify that it complies with relevant guidelines and principles[18];

(c) Certify the emission reductions resulting from a validated project upon request of a project participant[10];

(d) Have its decisions on Article 6 projects approved by the executive board of the CDM[18].

59. A Party participating in Article 6 projects shall:

(a) Approve Article 6 projects[4,10,18,24];

(b) Approve the participation of legal entities in an Article 6 project[4,10,18];

(c) Maintain a national registry containing records of holdings, transfers and acquisitions of ERUs by the Party itself and legal entities resident in the Party[4];

(d) Report annually on its projects under Article 6 within the framework of its reporting commitments[4,10,24] under [Article 7[4,10,24]] [Article 6[4]].

60. A Party participating in Article 6 projects may:

(a) Develop rules or guidance for the participation in projects under Article 6 of that Party and of legal entities resident in that Party[4,18];

(b) Develop its own internal mechanisms and criteria for project approval based on its domestic circumstances[4,18].

Appendices to Part Two

APPENDIX A:

Baselines[10]

APPENDIX B:

Monitoring[10], reporting[4], verification[4] and certification/issuance of ERUs[2,10]

APPENDIX C:

Registries[2]

PART THREE

CLEAN DEVELOPMENT MECHANISM

I. NATURE AND SCOPE

A. Purpose

61. The purpose of the CDM is:

(a) To assist Parties not included in Annex I in achieving sustainable development and in contributing to the ultimate objective of the Convention[11,12,13,19];

(b) To assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3[11,12,13,19]; and

(c) To assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation by ensuring that a share of the proceeds of each project is assessed for this purpose[3].

62. "Any certified emission reductions which a Party acquires from another Party in accordance with the provisions of Article 12 shall be added to the assigned amount for the acquiring Party"[1,10,11].

B. Principles

63. In their actions to achieve the purpose of the CDM, the Parties shall be guided, *inter alia*, by:

(a) Article 3 of the Convention[11];

(b) Equity[3,11,13] between developed and developing country Parties[13], including equity with respect to per capita greenhouse gas emissions[13], based on equitable developmental rights and balanced regional activity[11], so as to not perpetuate existing inequities between Parties included in Annex I and developing country Parties[13];

(c) Climate change effectiveness (ie. real, measurable and long-term benefits related to the mitigation of climate change are to be achieved at the project level)[7,11,13,18];

(d) Sustainable development[7,11,12,13,19];

(e) Additionality in net environmental benefits[7];

(f) Austerity and efficiency to minimize bureaucratic aspects[12];

(g) Transparency[11];

(h) Non-discrimination[11];

(i) Prevention of distortion of competition[11];

(j) Special needs of least developed countries[11];

(k) Transfer of technology and financial resources to Parties not included in Annex I[12].

(l) Option 1: [The concept of 'fungibility' among the three mechanisms of the Protocol is totally unacceptable[6].] [There is no link between Article 12, Article 6 and Article 17. The three Articles are mutually exclusive[13].] [CERs may be acquired only by a Party included in Annex I to the Protocol and they are not tradable or transferable to another Party[20].]

Option 2: [Acquired AAUs, ERUs and CERs can be used to fulfil a Party's own obligations or be the object of further trade[18].] [CERs, in principle, can be fungible with ERUs and AAUs. However, the use of CERs in emissions trading needs to be further discussed through the rule-making process for the CDM[19].]

C. "Part of"/ supplementarity

64. Option 1: "Parties included in Annex I may use certified emission reductions accruing from such project activities to contribute to compliance with part of their quantified emission limitation and reduction commitments under Article 3, as determined by the Conference of the Parties serving as the meeting of the Parties to this Protocol."[1]

Option 2: CDM project activities shall be supplemental to domestic actions by developed country Parties to meet part of their quantified emission limitation or reduction commitments[11].

Option 3: Net acquisitions by a Party included in Annex I for all three mechanisms together must not exceed the higher of the following alternatives:

(a) 5 per cent of: $\frac{\text{its base year emissions multiplied by 5 plus its assigned amount}}{2}$

(where 'base year emissions' may be replaced by 'average annual emissions in the base period, as provided for in Article 3, paragraph5')[10];

(b) 50 per cent of: the difference between its annual actual emissions in any year of the period from 1994 to 2002, multiplied by 5, and its assigned amount[10].

However, the ceiling on net acquisitions can be increased to the extent that a Party included in Annex I achieves emission reductions larger than the relevant ceiling in the commitment period through domestic action undertaken after 1993, if demonstrated by the Party in a verifiable manner and subject to the expert review process to be developed under Article 8[10].

Option 4: The overall 'cap' on the use of the three mechanisms should not exceed 25-30 per cent as a maximum[20].

Option 5: Parties included in Annex I may achieve up to 25 per cent of their quantified targets through CDM project activities[7].

Option 6: No determination of the term "part of"[4].

Option 7: Limits may be levied in the short-term on CERs used by Parties included in Annex I to meet the limitation and reduction commitments but, in the long-term, CERs may be freely utilized[19].

D. Participation

65. Participation in a CDM project activity is voluntary[7,13,18].

66. Option 1: A Party included in Annex I shall only use CERs to contribute to compliance if the Party:

(a) Has ratified the Protocol[3,10,12,24];

(b) Is bound by a compliance regime adopted by the COP/MOP[10,24];

(c) Has not been excluded from participation in the CDM according to the procedures and mechanisms under the compliance regime[10,24];

(d) Has satisfied prescribed domestic effort in fulfilment of commitments under Articles 2[18] and 3[11,13];

(e) Is in compliance with its commitments under Articles 5[4,10,18] and 7[4,10,18] and under Article 12 of the Convention[10,24];

(f) Is in compliance with all CDM rules and guidelines and relevant provisions in the Protocol[3].

Option 2: A Party included in Annex I may not use CERs accruing from CDM project activities if that Party is found not to be in compliance with its obligations under Articles 5 and 7[5].

67. If a Party's consistency with the eligibility requirements is called into question [by the review process under Article 8[4]] [by other means[4]], the issue will be expeditiously resolved [through a general procedure applicable to the Protocol[4]] [through a specialized procedure[4]][4].

(Note: The brackets in the above paragraph were submitted by the Parties as options.)

68. A Party not included in Annex I shall only benefit from project activities under Article 12 if the Party:

(a) Has ratified the Protocol[3,10,12,24];

(b) Is bound by a compliance regime adopted by the COP/MOP[10,24];

(c) Has not been excluded from participation in the CDM according to the procedures and mechanisms under the compliance regime[10,24];

(d) Is in compliance with its commitments under Article 12 of the Convention[10,24];

(e) Is in compliance with all CDM rules and guidelines and relevant provisions in the Protocol[3].

69. No unilateral measures for CDM participation should preclude a developing country Party from participating in any CDM project activity[11,15].

70. A Party not included in Annex I may formulate and develop projects under the CDM without a previous agreement with an entity or Party included in Annex I[12].

71. Private and/or public entities can participate in the CDM with the approval of the Parties involved in CDM projects[3,4,10,18,19,24], subject to:

(a) The Party in which the entity is resident being eligible to acquire or transfer CERs[24];

(b) International guidelines for public and/or private entities[19];

(c) Guidance provided by the executive board[11];

(d) Compliance with CDM rules and guidelines[3,18];

(e) Compliance with relevant provisions in the Protocol[3,18];

(f) Compliance with any rules or guidance for participation in CDM project activities established by the Party in which the entity is resident[4,18].

72. Parties are responsible for the involvement of their private and/or public entities in CDM project activities[11,18]. Participation of private and/or public entities in project activities does not affect the responsibility of Parties included in Annex I for the fulfilment of their commitments under the Protocol[3,10,24] and the Convention[3].

73. The Parties participating in the CDM project activities must be responsible at all stages and in all aspects for the project activity in which they are participating[11]. Any costs, risks or liabilities that have not been expressly accepted by the Party not included in Annex I before approval of the CDM project activity shall be assumed to be the responsibility of the participating developed country Party[11]. In cases where no Party included in Annex I or entity resident in such a Party is involved, the host country assumes total responsibility for the project[12].

E. Share of proceeds

74. A share of the proceeds from CDM project activities shall be used to:

(a) Cover [administrative expenses of the CDM[4,10]] [costs pertaining to the activity of the executive board[18]];

(b) Assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation[4,10,11,13,18].

75. The share of proceeds is defined ...

- Option 1: as __ per cent of the number of CERs issued[12,19].
- Option 2: as __ per cent of the value of the CERs issued[7,18].
- Option 3: on the basis of the CERs[4,10].
- Option 4: as __ per cent of the value of each CDM project[20].
- Option 5: as a stipulated percentage of the differential of the costs incurred by the Party included in Annex I in reducing greenhouse gas emissions through a project activity in a Party not included in Annex I and of the projected costs that would have been incurred if the greenhouse gas emission reduction activity had taken place in the Party included in Annex I which is funding the project activity[13].

76. The share of proceeds to cover administrative expenses is set to three per cent of the market value of the CERs[7]. The responsibility to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation is to be shared among all the Parties, provided that Parties included in Annex I bear a larger share[7].

77. The share of proceeds [should be restricted to a limited amount[4]] [should be established at a relatively low level[18]] [should not exceed a defined level of total project cost, depending on the hazard rate from climate change to both the economy and the public[18]].

78. Option 1: A CDM adaptation fund should be established for the purpose, *inter alia*, of administering the share of proceeds devoted to meeting the costs of adaptation[11].

Option 2: The share of proceeds for adaptation projects shall be channelled through an existing international institution to be determined by the COP/MOP[10].

II. METHODOLOGICAL AND OPERATIONAL ISSUES

A. Project validation/registration

79. Project activities under the CDM shall:

(a) Cover [one or more of the gases listed in Annex A of the Protocol[4]] [only CO_2 until the COP/MOP decides that other gases should be included[18]];

(b) Provide reductions in emissions[, in one or more of the sector/source categories listed in Annex A of the Protocol[7],] [and/or an enhancement of removals[4,7,20]] that are additional to any that would occur in the absence of the project activity[4];

(c) Assist the host Party "in achieving sustainable development"[1,2];

(d) Be based on the best available long-term environmental option, taking into account local and national needs and priorities[3];

(e) Lead to the transfer of state-of-the-art, environmentally sound technology in addition to that required under other provisions of the Convention and the Protocol[3,11,13];

(f) Give priority to renewable energy[3,12], energy efficiency[12] and reducing emissions from the transportation sector[12];

(g) Not support the use of nuclear power[3].

80. Projects aimed at enhancing the anthropogenic or non-anthropogenic removals by sinks of greenhouse gases are not eligible for funding under the CDM[3,24] until [the outcome of

methodological work on Article 3, paragraphs 3 and 4, is reached[11,19]] [the COP/MOP decides on the eligibility of CDM projects to enhance anthropogenic removals of greenhouse gases by sinks[7,24]] [methods are developed allowing for reliable process assessment[18]].

81. CDM project activities may be embedded in broader projects which are undertaken for reasons other than climate change[15]. In such cases, emission reductions from the CDM component of the broader project shall be additional and subject to certification procedures[15].

82. [Validation[10]] [registration[4]] [presentation[12]] of a project activity is a prerequisite for the certification and issuance of CERs related to that project activity[4,7,10].

83. Option 1: Project activities shall be [validated[10]] [registered[4]] [presented[12]] by operational entities[4,10], upon request of a project participant[10].

Option 2: A designated operational entity shall prepare a [validation[10]] [registration[4]] [presentation[12]] report [in accordance with Appendix B[4]] on the project activity to the executive board[24]. The executive board shall accept or reject the project[24], based on the [recommendation[2]] [decision[2]] in the report[24] and other relevant information[2], and inform the participants whether the project may begin[2].

84. Decisions on [validation[10]] [registration[4]] [presentation[12]] shall be published in a suitable manner[10] and [validation[10]] [registration[4]] [presentation[12]] reports shall be public information[2]. Substantial objections by stakeholders shall be taken into account[24].

85. A project activity shall be [validated[10]] [registered[4]] [presented[12]] only if:

(a) It is approved by each Party involved[4,10,13,19,24] as indicated by a letter of endorsement[18,24];

(b) All public and/or private entities involved demonstrate their eligibility to participate in the CDM[10];

(c) It contributes to the sustainable development priorities of the Party not included in Annex I and is compatible with national priorities and needs[13] as determined by the host Party[3,4,11,13,18,24];

(d) It meets the criteria for CDM projects established by host Parties and by Parties included in Annex I involved in the project[4];

(e) It provides an emissions baseline that meets the approved criteria specified in Appendix A[3,4,10,18,27];

(f) It is expected to yield real, measurable and long-term benefits related to the mitigation of climate change[3,4,10,18];

(g) It is expected to lower emissions from the level that would have occurred in the absence of the project activity[3,4,10,18,19];

(h) Financing is secured (except in cases where assistance in terms of Article 12, paragraph 6, is being requested)[22];

(i) Funding is additional to commercially-viable investment[7,19] and additional to funding provided through official development assistance (ODA), the Global Environment Facility (GEF) and other financial commitments of the Parties included in Annex I[13,19];

(j) It provides a monitoring plan, which meets the approved criteria specified in Appendix C, for the collection of data to track the performance of the project and, as appropriate, the baseline[4,24];

(k) Confirmation is provided that adequate local capacity exists or will be developed[22];

(l) It provides an agreement on the sharing among participants of the CERs that will accrue and the payment of administrative expenses and the contribution to adaptation assistance[27].

86. The determination of whether a proposed project activity contributes to the sustainable development priorities of the Party not included in Annex I shall be ...

- Option 1: made solely by the Party not included in Annex I[4,7,11,13,19].

- Option 2: specified by the Party not included in Annex I in its letter of endorsement[24].

- Option 3: made by the Party not included in Annex I using procedures developed by the United Nations Environment Programme (UNEP) and the Commission on Sustainable Development (CSD) as they become available[18,27].

- Option 4: made by the Party not included in Annex I using international guidelines, indicators and/or standards developed by the Parties to meet the sustainable development objectives of the Protocol as a whole by, for example, utilizing the best available environmental technologies[3].

- Option 5: made by the Party not included in Annex I and confirmed in a written statement indicating how the project activity and its results:

(a) are consistent with all relevant international agreements relating to sustainable development to which the Parties involved are a party[10];

(b) assist in achieving sustainable development, taking into account its economic, environmental and social conditions according to its own priorities and needs and the need to minimize adverse environmental, social and economic effects taking into account existing guidance for sustainable development[10];

(c) contribute to the ultimate objective of the Convention[10].

87. The emissions baseline shall reflect the 'no project' scenario[7] and shall be the basis for calculating the environmental additionality of the project[10,18] and the emission reductions to be certified[7]. The operational entity shall assess whether the baseline of the proposed project meets the criteria in Appendix A[4,10]. This shall involve an assessment of the credibility of the baseline, the major risks regarding the emission reduction and potential leakage effects of the project[27]. Project baselines should be credible, verifiable, and, where possible, consistent and comparable[3].

88. Option 1: Baselines shall be determined on a project-by-project basis[7,11,19]. In some cases, in accordance with Appendix A, sectoral baselines[7] and standard baselines for project categories for each host Party[19] may be applied.

Option 2: Baselines need to be established at national levels[21,22] as per national communications[21]. These [need to be[22]] [may be[21]] backed up by project-by-project baselines[21,22].

89. The operational entity shall assess the adequacy of the proposed monitoring plan by assessing its method, frequency and accuracy of measurement[24].

90. If public funds are used, the project participants shall prove that the funding of the project activity will not result in a diversion of, or competition with, ODA and GEF funding[10].

91. Option 1: A project activity [commenced after 11 December 1997[4]] [, as well as any project activity under the AIJ pilot phase[4,7,12,19], with the agreement of the participating Parties,[4]] shall be eligible for consideration as a CDM project activity if it meets the criteria contained in Appendices A and B[4,7,10,12,18,19]. Following project [validation[10]] [registration[4]] [presentation[12]], resultant reductions in emissions by sources [and/or enhancements of removals by sinks[4,20]] from 1 January 2000 onwards will be eligible for retrospective certification[4,7,10,11,12].

Option 2: Activities implemented jointly under the pilot phase shall be automatically converted into CDM projects[18].

92. Two or several small-scale projects of the same kind may be bundled so as to be subject to a single transaction involving a single Party included in Annex I, without losing their own

project identity with respect to requirements for validation, verification and certification[15]. The Party included in Annex I may be acting on its own or on behalf of several small-scale investors[15].

93. Operational entities involved in [validation[10]] [registration[4]] [presentation[12]] shall have no operational or financial links with CDM project activities[3,10] and shall not be entitled to participate in the identification, development or financing of CDM projects[10].

94. A Party may develop its own internal mechanisms and criteria for project approval based on its domestic circumstances[4]. These mechanisms and criteria shall be made publicly accessible[4]. A Party may define priority sectors for the formulation of CDM projects[7].

B. Project financing

95. Developed country Parties shall fund CDM projects in developing country Parties. Developed country Parties may involve private and/or public entities in such funding[11]. Funding of CDM projects shall be additional to ODA, GEF and other financial commitments of the developed country Parties[10,11].

96. Option 1: Participants may finance projects [unilaterally[12], bilaterally[27] or multilaterally[27]] [in any manner they wish[18]]. A Party not included in Annex I may formulate and develop projects under the CDM without a previous agreement with an entity or Party included in Annex I[12,19].

Option 2: Projects [shall[7]] [may[4]] be financed through a portfolio approach[4,7], under a sole supplier arrangement, by means of a centralized market[7]. This market may operate through regional entities accredited by the executive board[7]. CER prices shall be set using criteria of joint supply by sectors of the economy, regardless of the origin of the project[7].

Option 3: Projects should be financed through a multilateral arrangement, a clearing house and a fund[8]. This may accommodate both public and private investment funds[8]. The clearing house should be the coordinating office and could serve to facilitate, *inter alia*, the selection and screening of projects and resource mobilization and utilization[8].

97. Modalities and procedures for project eligibility shall ensure that CDM investments take place in Parties that are often marginalized by purely market-based instruments[3]. These should include portfolio approaches that allow investments in small-scale and geographically remote projects to be funded in a cost-effective manner[3].

98. "The CDM shall assist in arranging funding of certified project activities as necessary"[1].

99. Option 1: Where assistance in arranging funding of CDM project activities is necessary, a Party not included in Annex I may prepare project proposals that meet CDM eligibility criteria

and apply for financial and technical support[18]. The basic condition for placing CDM projects on the market should be the possession of a certificate granted by the operating authority appointed by the Conference of the Parties, submitted to the CDM board[18].

Option 2: The [COP[16]] [COP/MOP[2]] should establish a 'CDM Equitable Distribution Fund' to provide financial assistance to CDM project activities where necessary[16]. It would be funded by Parties included in Annex II at a substantial level to be decided by the COP/MOP in accordance with a formula to be determined[16]. CERs resulting from CDM projects made possible by this fund would be distributed to the Parties included in Annex II in proportion to their contributions[16]. This fund should be administered by the executive board[16]. Parties not included in Annex I may propose CDM projects individually or jointly[16]. The executive board would award grants to projects in accordance with criteria established by the COP/MOP[16]. Criteria could take into account geographic distribution of existing and planned CDM projects, the comparative need of regions or countries to receive assistance in achieving sustainable development, and the contribution of the proposed project to the global effort to limit and reduce greenhouse gas emissions[16]. Grants would not necessarily have to offset the full cost of a CDM project[16].

100. Forty per cent of the available money shall be allocated to eligible African countries[5].

C. Project monitoring

101. Participants shall develop a monitoring plan containing information on their procedures for accurate, systematic and periodic monitoring of the project in accordance with the criteria in Appendix C[7,10]. This will be assessed and accepted by the operational entity as part of the [validation[10]] [registration[4]] [presentation[12]] process[24].

102. Participants shall ensure that the monitoring plan is properly implemented, that all relevant data are collected, recorded and stored[3,4,7,18,24] [in a standardized format[3,7,11,18,24]], and are reported to the relevant entity for certification purposes[4]. The monitoring results shall be entered into an electronic national CDM database[27].

103. The continuing adequacy of the monitoring plan and its implementation shall be assessed by the designated operational entity in its verification reports to the executive board[24].

D. Project verification

104. Emission reductions achieved by the project in relation to the [validated[10]] [registered[4]] [presented[12]] baseline shall be [periodically[27]] verified from the monitored data and other pertinent information, in accordance with the methodology and standardized format contained in Appendix C[7,11,27]. Should the monitoring data be inadequate or insufficient, additional data from other sources may be used[4]. The verifier shall also review compliance with the modalities set up for project monitoring and reassess the basic project assumptions if this is necessary[27].

105. Such verification shall be performed independently by a designated operational entity selected by the [proponents of the CDM project[12]] [host Party[11]]. It should be of recognized technical capacity to assume the responsibility involved[12]. The verifying entity shall report to the project participants, including the Parties involved, the executive board[24] and operational entities[12].

106. Verification shall be undertaken by entities with no operational or financial links with CDM project activities[3,11,18]. Such entities are fully accountable to the COP/MOP[3,11], through the executive board[3].

E. Certification/issuance of CERs

107. Certification of emission reductions shall be conducted at regular intervals and in accordance with Appendix C[4,24]. The procedure shall be as follows:

- Option 1: CERs shall be calculated as emission reductions by sources [or enhancements of removals by sinks[4,20]] that are additional to any that would have occurred in the absence of the project activity[3,10,18,24], as indicated by the baseline[24], where such reductions [or enhancements[4,20]] are real, measurable and long-term[3,10].

- Option 2: CERs for the benefit of the Party included in Annex I shall be calculated as the difference between project emission levels and the OECD average[17]. CERs that are not assigned to the investor Party, calculated as the difference between the regional average (excluding Parties included in Annex II) and the OECD average, shall form part of a future options system for the Party in which the project takes place[17].

108. Emission reductions from a [validated[10]] [registered[4]] [presented[17]] baseline[10,11] resulting from a project shall be certified, after they have occurred, only if:

(a) A participant in the project applies for the certification of the emission reductions resulting from the project during a specific period of time[10];

(b) The project activity has been validated and continues to meet the requirements for project validation[10];

(c) All Parties involved are entitled to participate in the CDM[10] and the Party financing the project is in compliance with the Protocol, in particular with Articles 2, 3, 5, 7 and 10[18].

109. The certification of emission reductions and issuance of CERs shall be performed by

- Option 1: a designated operational entity[4,7,10,11,19], upon request of a project participant[10].

- Option 2: the executive board on the basis of a verification report, which states whether the project meets the necessary requirements and the amount of emissions reductions achieved by the project in the period since the last certification was performed, as submitted by a designated operational entity[24].

- Option 3: the host Party government in accordance with its own procedure, with reporting to the executive board[12].

- Option 4: the Convention body[27].

110. The criteria provided in Appendix A for the preparation of baselines and calculation of emission reductions are to ensure methodological compatibility in treatment across CDM projects[7] and between CDM and Article 6 projects[7]. Source/sink categories used in determining emission reductions from CDM projects shall be consistent with those used by Parties included in Annex I in their national inventories[7].

111. The [operational entity[10]] [executive board[24]] [host Party government[12]] [Convention body[27]] shall inform the applicant of its decision in writing immediately upon completion of the certification process[10]. Decisions on the certification of emission reductions shall be published in a suitable manner[10].

112. Once the emission reductions have been certified and the specified share of proceeds has been remitted to the executive board[4,27], the [operational entity[10]] [executive board[24]] [host Party government[12]] [Convention body[27]] shall issue the appropriate number of CERs to project participants, including the Parties involved, as agreed among themselves[4,12,18,27]. Each CER shall have a unique serial number, from which it is possible to identify the project activity, country of origin, the year of certification and the certifying entity[3,4,10,18,24]. The CERs shall be deposited to the registry accounts of the recipients and shall be trackable through the registry system[4,12,18].

(Note: One Party proposes that the certification process should be complemented, at the project level, by a system of guarantees against risks to ensure the continuance of mitigation effects during the specific period of certification.)

113. Certification shall be undertaken by entities with no operational or financial links with CDM project activities[3,10] and [shall not have been involved in the identification, development, financing or validation of the project[24]] [shall not be entitled to participate in the identification, development or financing of CDM projects[4,10]].

F. Issues related to compliance

114. Steps to address cases of non-compliance with the provisions of the CDM should be based on guidelines to be laid down by the COP/MOP in accordance with procedures defined under Article 18[7]. Issues arising shall be expeditiously resolved [through a general procedure applicable to the Protocol[4]] [through a specialized procedure[4]][4].

(Note: The brackets in the above paragraph were submitted by the Parties as options.)

115. In the case of a Party's non-compliance with its obligations resulting from the Protocol, and from its Article 3 in particular, CERs acquired under the CDM should be invalidated, either in full or in part, and can not be counted as the fulfilment of assumed obligations to reduce greenhouse gas emissions[18].

116. A Party operating under Article 4 [may[4]] [may not[4]] acquire any CERs resulting from projects under Article 12 if another Party operating under the same Article 4 agreement, or if a regional economic integration organization to which the Party belongs and which is itself a Party to the Protocol, is found not to be in compliance with its obligations under Articles 5 and 7[4].

(Note: The matter in the above paragraph was raised by the Parties as an issue to be addressed, but not as a proposal.)

G. Adaptation assistance

117. An adaptation fund shall be established to administer the share of proceeds used to assist with adaptation costs[3,11]. The generation of funding for adaptation through this share of proceeds must be additional to the current and future financing by Parties included in Annex I of adaptation activities under other provisions of the Convention and the Protocol[3].

118. The special vulnerabilities and character of small island developing states shall be taken into account and provided for in the development of an adaptation fund and in all adaptation capacity-building processes[3].

119. Adaptation project activities and measures to be implemented under Article 12, paragraph 8, shall be guided by information from national communications and the three-stage approach, as set out in decision 11/CP.1 (FCCC/CP/1995/7/Add.1)[10].

120. Parties not included in Annex I should identify adaptation projects for funding, and should follow a process of adaptation options identification[4,11]. Consideration of this aspect should be consistent with ongoing work on adaptation under the Convention[11]. A Party not included in Annex I that is particularly vulnerable to the adverse effects of climate change shall prepare a national adaptation programme, taking into account the distribution of actions over time and including estimates of the full cost, with its breakdown into sectors[18].

121. Project activities and measures that help particularly vulnerable Parties not included in Annex I to adapt to the adverse effects of climate change shall be financially assisted by the adaptation fund only if they meet the following requirements:

(a) They shall be consistent with all relevant international agreements and internationally agreed programmes of action for sustainable development[10];

(b) They shall be country-driven and in conformity with the national strategies and priorities for sustainable development of the Parties concerned[10];

(c) They shall be implemented in a cost-effective manner[10].

122. The amount of adaptation assistance should not exceed a specified share of the total project cost, depending on the estimated adverse effects of climate change on the economy and the public[18].

H. Registries

123. A central registry shall be established with the aim of tracking the generation, transfer and retirement of AAUs, CERs and ERUs transferred under the Protocol mechanisms[3].

I. Reporting by Parties

124. Parties included in Annex I participating in CDM projects shall report on their CDM activities:

(a) Annually within the framework of their reporting commitments under Article 7, paragraph 1[10,18,24], specifying, in a standard format, *inter alia*:

(i) New CERs issued to the Party as a result of CDM project activities during that year (identified by serial number)[2];

(ii) Any CERs (identified by serial number) that have been retired that year[2];

(b) Within the framework of their reporting commitments under Article 7, paragraph 2[10,18,24], specifying, *inter alia*, how the Party's CDM projects have assisted Parties not included in Annex I in achieving sustainable development and in contributing to the ultimate objective of the Convention[10].

125. Parties not included in Annex I shall report on their activities under Article 12 in the context of their reporting commitments under Article 12 of the Convention, according to guidelines to be established by the [COP/MOP[24]] [COP[2]][24]. This reporting shall include how

they have assisted Parties included in Annex I in achieving compliance with their commitments under Article 3[10].

III. INSTITUTIONAL ISSUES

A. Role of the COP/MOP

126. "The CDM shall be subject to the authority and guidance of the COP/MOP"[1,4,7,10,11].

127. In relation to methodological and operational issues, the COP/MOP shall, *inter alia*:

(a) Determine the "part of the quantified emission limitation and reduction commitments under Article 3"[1] which Parties included in Annex I can meet through CERs[10,24];

(b) Elaborate, review and approve methodologies for determining baselines[4]; monitoring[4], verification[4,10], certification[4,10] and reporting[4,10] and issue technical guidelines for their practical application[24];

(c) "Ensure that a share of the proceeds from certified project activities is used to cover administrative expenses as well as to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation"[1,4,10] and determine that share[24];

(d) Determine eligibility criteria for adaptation under Article 12, paragraph 8, designate the entity entrusted with the operation of the financial mechanism of the Convention and adopt modalities, procedures and technical guidelines[24].

128. In relation to institutional issues, the COP/MOP shall, *inter alia*:

(a) Define the terms of reference for[4,10,24], and establish[18,24], the executive board;

(b) Determine the modalities and procedures governing the operation of the CDM[4,24];

(c) Designate operational entities[10,18,24], or establish guidelines as a basis for delegating this function[24], and decide which functions they will carry out[10,18];

(d) Disqualify, upon recommendation of the executive board, operational entities from certifying emission reductions if the executive board concludes that the requirements for the certification of the emission reductions have not been fulfilled[10];

(e) Determine the basis for private and public sector participation in CDM projects[18];

(f) Establish rules and procedures for the preparation and distribution of the provisional agenda of executive board meetings and for presentations to be made to the executive board by Parties and accredited observers[20];

(g) Establish a body to be responsible for sanctions and penalties for non-compliance in the framework of the Protocol and its mechanisms[18];

(h) Determine the nature and extent of the supervisory role of the executive board over the CDM and the implications of the subordination of the executive board to the COP/MOP[20].

129. In instances of a dispute arising between Parties, transfers and acquisitions of CERs may continue to be made after the issue has arisen, provided that any such CERs may not be used by a Party to meet its commitments under Article 3 until the issue is resolved[7]. Arbitration for disputes between Parties shall be undertaken in accordance with Article 14 of the Convention[7].

B. Executive board

130. The executive board shall supervise[3,4,7,11,18,19] and be responsible for[3] [the CDM[11]] [the daily management of the CDM[3,4,18]] as a [separate standing body of the COP/MOP[4]] [independent body[3,18]]. The executive board shall be fully accountable to the COP/MOP[3,4,11] and shall carry out all instructions and all other functions assigned to it by the COP/MOP[10].

131. In relation to methodological and operational issues, the executive board shall, *inter alia*:

(a) Define the areas from which projects can be included in the CDM and define the types of projects that can be included[12];

(b) Supervise CDM project activities to ensure that these are in conformity with the Convention, the Protocol and all relevant decisions by the COP/MOP[10];

(c) Determine the criteria that the Parties must use for establishing baselines[12];

(d) Ensure that information on baselines used for project evaluation, including standardized baselines, is publicly accessible[4];

(e) In so far as authorized by the COP/MOP, provide guidance for public and/or private entity participants[10];

(f) Review reports submitted by operational entities and provide synthesis reports to the COP/MOP[4,19];

(g) Issue CERs on the basis of verification reports submitted by designated operational entities[24];

(h) Publish, in a timely manner, information on transfers of CERs, including, *inter alia*, dates, project type, project start date, participating Parties and organizations, and quantity and prices of CERs transferred[7].

(i) On the basis of a centralized trading mechanism, play a fiduciary role which will:

(i) Guarantee a favourable commercial position to negotiate a fair price for the Parties involved[7];

(ii) Ensure the transparency and credibility of the trading process[7];

(iii) Reduce transaction costs[7];

(iv) Lower the environmental risk by means of a portfolio approach guaranteeing the effectiveness and credibility of the mechanism[7];

(j) Determine the methodology used for the transfer of CERs[12];

(k) Determine the percentage of CERs that will be part of the adaptation fund and the manner in which the CERs will be transformed into financial resources[12];

(l) Assist in arranging funding of CDM project activities as necessary, including acting as a project clearing-house and publishing summary information on proposed CDM projects in need of funding[24];

(m) Assign, as necessary, functions to other institutions under Article 12 within the framework provided for by the COP/MOP[10];

(n) Define the roles of the multilateral agencies with experience in climate change, especially as regards development of the institutional capability required to promote broad participation by all Parties not included in Annex I[7].

(o) Call on experts for technical advice if deemed necessary[4];

(p) Hold its meetings open to all Parties and accredited observers[20];

(q) Record and communicate the full text of its decisions, in all six official languages of the United Nations, to Parties and persons and entities that the COP/MOP believes should receive them[20].

132. In relation to institutional issues, the executive board shall, *inter alia*:

(a) [Accredit operational entities based on guidance from the COP/MOP[4]] [coordinate the designation by Parties of the national operational entities, which will be in charge of the functions of the CDM in each Party[12]];

(b) Provide guidance for the involvement of private and/or public entities in CDM project activities[11];

(c) Review and audit operational entities[, through carrying out sample checks[10],] and revoke, in accordance with a process to be determined by the COP/MOP, the accreditation of operational entities which fail to comply with modalities and procedures determined by the COP/MOP[4,10];

(d) Maintain a publicly available list of operational entities[4];

(e) Report on its operations to each session of the COP/MOP[10];

(f) Administer the 'CDM Equitable Distribution Fund'[16].

133. The executive board shall, in accordance with Article 12, paragraph 8, receive a share of proceeds from certified project activities to cover its administrative expenses[4]. [The secretariat shall, within its functions outlined in Article 8 of the Convention, support the executive board as necessary[10], under the guidance of the COP/MOP[4]] [The executive board should be supported by a dedicated secretariat, comprising of technical and administrative staff[22]. The Convention secretariat should be extended to accommodate this[22].]

134. The executive board shall consist of [x] members[4,10] elected by the COP/MOP[7,20] and shall comprise

- Option 1: an equal number of representatives from Parties included and not included in Annex I[4,7,17], elected by Parties included and not included in Annex I respectively[4].

- Option 2: a fair and geographically equitable membership[3,11] and be functionally small[11].

- Option 3: two representatives from Asia, two representatives from the Americas, two representatives from Europe, two representatives from Africa and one representative from the island States, making up a total of nine members[7]. Members shall be proposed by the Parties[7].

- Option 4: an equal number of persons, but not less than two, nominated by each of the five United Nations regional groups[20]. A vacancy should be filled by the COP/MOP electing a successor who is nominated by the regional group that nad nominated the person holding the position that became vacant[20].

135. Members of the executive board should be appointed for a period of up to two years[7]. Members should possess appropriate technical expertise[3]. The COP/MOP shall select a Chairman and a Vice-Chairman of the executive board from among its members, with one of those officers being from a Party not included in Annex I[20].

136. All decisions of the CDM executive board must be taken only by consensus[29]. There should be a prohibition against the executive board taking a decision unless at least one member of the executive board from each of the five United Nations regional groups is present in person[20]. The executive board should not be allowed to delegate any decisions for which it is responsible[20].

137. The executive board should be located in the secretariat of the Convention[7].

C. Operational entities

138. Operational entities shall:

(a) ["Be designated by the COP/MOP"[1,11]] [be designated by the COP/MOP or by a national or regional authority to which this function was delegated by the COP/MOP[24]] [be accredited by the executive board based on selection criteria[4]];

(b) Be supervised by the executive board[3,10,11] and fully accountable to the COP/MOP, through the executive board[3];

(c) Be subject to modalities and procedures specified in applicable decisions of the COP/MOP[4];

(d) Have no operational or financial links with CDM project activities[3,10,11,18] and [shall not have been involved in the identification, development, financing or validation of the project[11,24]] [shall not be entitled to participate in the identification, development or financing of CDM projects[4,10]].

139. Option 1: Entities shall be designated as operational entities only if they:

(a) Provide for the necessary expertise and the necessary means to validate project activities, to certify emission reductions and to carry out sample checks if so mandated[10];

(b) Work in a credible, independent, non-discriminatory and transparent manner and ensure, where appropriate, that the certification is based on internationally agreed standards[10];

Option 2: The Parties must designate their national operating entities, and inform the secretariat of the Convention and the executive board[12]. The procedure to appoint the national operating entities will be the attribute of each Party, which can create a new entity or choose an existing entity for this role[12].

140. The functions of an operational entity shall be to:

(a) [Validate[10]] [register[4]] [present[12]] project activities under Article 12[4,10], on request of a project participant[10], to ensure that it meets the standards agreed by the COP/MOP[24];

(b) Option 1: Verify emission reductions achieved by projects and propose their certification by means of a verification report to the executive board[24];

Option 2: Certify emission reductions by sources [and/or enhancements of removals by sinks[4]] which have resulted from CDM project activities[4,11] and issue CERs[4];

(c) Transfer a share of proceeds to [...] to cover administrative expenses and to [...] to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation[4];

(d) Publish their decisions on the validation of project activities in a suitable manner[10];

(e) Submit annual activity reports to the executive board in accordance with the modalities and procedures for reporting[4].

D. Parties

141. Each Party participating in the CDM project shall establish a national system for the monitoring, verification and reporting under the CDM, which may include establishing an institution for coordinating and managing the governmental approving authority, steering committee, and expert body for settling of substantial matters[16].

142. A national CDM authority shall:

(a) Determine independent criteria for project eligibility on the basis of national priorities/strategies for sustainable development[7];

(b) Evaluate projects using national criteria and international standards[7];

(c) Approve projects and formalize the official recognition of the designated national authority[7];

(d) Promote broad participation by public, private and non-governmental organizations[7];

(e) Coordinate international fora, including operational activities in verification and certification, with the executive board and the accredited entities[7];

(f) Register individuals and organizations involved in the trading of CERs[7];

(g) Register and account for national emission reductions reported to the executive board and traded by the executive board through its accredited entities[7];

(h) Reconcile the national account and report it annually to the executive board[7];

(i) Ensure fair distribution of the economic benefits among project participants[7].

E. Administrative support

143. The secretariat [within its functions outlined in Article 8 of the Convention[10]] [on request by the executive board[4]] shall [support the executive board as necessary[10]] [provide administrative and secretariat assistance to the executive board[4,24]]. This assistance could include compiling, synthesizing and disseminating information related to CDM activities, including in relation to Article 12, paragraph 6, and performing other secretariat functions as requested by the executive board[4].

144. The secretariat shall keep a record of executive board decisions and communicate the full text of all decisions to each Party and to the categories of persons and entities that the COP/MOP believes should receive them[20]. Provision should be made for decisions to be translated and communicated to Parties in all six official languages of the United Nations[20].

145. A share of proceeds according to Article 12, paragraph 8, shall be used to cover all administrative expenses of the CDM, including the administration of the executive board and administration of the share of proceeds for adaptation[10].

F. Review

146. The COP/MOP shall:

(a) Periodically review the operations of the executive board, operational entities and entities for independent verification[4,18];

(b) Review Article 12 modalities, procedures and technical guidelines five years after their adoption and periodically thereafter[10]. Any revision of these modalities and procedures will not have an impact on emission reductions already certified[10];

(c) Periodically review the implementation of CDM project activities and their geographical spread, and take appropriate action to promote the principle of equity[11];

(d) Option 1: Review the allocation of the share of proceeds for adaptation projects five years after the adoption of these modalities and procedures[10];

Option 2: Periodically review the needs of developing country Parties particularly vulnerable to the adverse effects of climate change for adaptation assistance under Article 12, paragraph 8[3];

(e) Periodically review the capacity-building needs of developed country Parties to access the CDM[3].

Appendices to Part Three

APPENDIX A:
Baselines[10]

APPENDIX B:
Validation/registration[4]

APPENDIX C:
Monitoring[10], reporting[4], verification[4] and certification/issuance of CERs[4]

APPENDIX D:
Registries[2]

APPENDIX E:
Procedures for the operation of the executive board[4]

APPENDIX F:
Guidelines for operational entities[4]

APPENDIX G:
Disbursement of the share of proceeds[4]

APPENDIX H:
Adaptation[10]

PART FOUR

EMISSIONS TRADING

I. NATURE AND SCOPE

A. Purpose

147. "The Parties included in Annex B may participate in emissions trading for the purposes of fulfilling their commitments under Article 3. Any such trading shall be supplemental to domestic actions for the purpose of meeting quantified emission limitation and reduction commitments under that Article."[1,11]

148. "... any part of an assigned amount, which a Party acquires from another Party in accordance with the provisions of ... Article 17 shall be added to the assigned amount for the acquiring Party."[1] "... any part of an assigned amount, which a Party transfers to another Party in accordance with the provisions of ... Article 17 shall be subtracted from the assigned amount of the transferring Party."[1]

B. Principles

149. In their actions to achieve the purpose of emissions trading, the Parties shall be guided, *inter alia*, by the following:

(a) Article 3 of the Convention[11];

(b) Equity[3,11,13,19] between developed and developing country Parties[13], including equity with respect to per capita greenhouse gas emissions[13], so as to not perpetuate existing inequities between Parties included in Annex I and developing country Parties[11,13];

(c) Climate change effectiveness[10,11,13,19] (i.e. real, measurable and long-term benefits related to mitigation of climate change are to be achieved[10,11,13]; overall emissions reductions should not be lower than would otherwise be the case[10]); resources gained from the sale of surplus assigned amounts must [should] be invested in measures that reduce emissions further[18];

(d) Cost-effectiveness (i.e. global benefits are to be achieved at the lowest cost)[4,10,19];

(e) Recognizing that the Protocol has not created or bestowed any right, title or entitlement[11];

(f) Ensuring that the Protocol has not created any asset, commodity or goods for exchange[13];

(g) Transparency[2,19];

(h) Prevention of distortion of competition[2].

(i) Option 1: The concept of 'fungibility' among the three mechanisms of the Protocol is totally unacceptable[6].

Option 2: [Acquired AAUs, ERUs and CERs can be used to fulfil a Party's own obligations or be the object of further trade[18]] [There is no restriction on the transfer of excess AAUs, ERUs and CERs[24]] [ERUs and CERs may be traded. However, the use of CERs in emissions trading needs to be further discussed through the rule-making process for the CDM[19]].

C. Supplementarity

Limits on acquisitions

150. Option 1: Acquisitions of assigned amount shall be supplemental to domestic actions for the purpose of meeting a Party's quantified emission limitation and reduction commitments under Article 3[14,21,22].

Option 2: Access to Article 17 by a Party included in Annex I should be contingent on satisfaction of prescribed domestic effort in fulfilment of commitments under Article 3[3,6,11,13].

Option 3: Net acquisitions by a Party included in Annex I for all three mechanisms together must not exceed the higher of the following alternatives:

(a) 5 per cent of: $\frac{\text{its base year emissions multiplied by 5 plus its assigned amount}}{2}$

(where 'base year emissions' may be replaced by 'average annual emissions in the base period, as provided for in Article 3, paragraph 5')[10];

(b) 50 per cent of: the difference between its annual actual emissions in any year of the period from 1994 to 2002, multiplied by 5, and its assigned amount[10].

However, the ceiling on net acquisitions can be increased to the extent that a Party included in Annex I achieves emission reductions larger than the relevant ceiling in the commitment period through domestic action undertaken after 1993, if demonstrated by the Party in a verifiable manner and subject to the expert review process to be developed under Article 8[10].

Option 4: The overall 'cap' on the use of the three mechanisms should not exceed 25-30 per cent as a maximum[20].

Option 5: No determination of the term "supplemental"[4].

Option 6: It is necessary to set limits on the use of mechanisms to meet emission targets in the first commitment period. However, if objective criteria to prevent hot air are established, it might be reasonable to remove limits in the second and third commitment periods[19].

Limits on transfers

151. Option 1: Access to Article 17 by a Party included in Annex I should be contingent on satisfaction of prescribed domestic effort in fulfilment of commitments under Article 3[3,11,13].

Option 2: Net transfers by a Party included in Annex I for all three mechanisms together must not exceed:

5 per cent of: $\frac{\text{its base year emissions multiplied by 5 plus its assigned amount}}{2}$

(where 'base year emissions' may be replaced by 'average annual emissions in the base period, as provided for in Article 3, paragraph 5')[10].

However, the ceiling on net transfers can be increased to the extent that a Party included in Annex I achieves emission reductions larger than the relevant ceiling in the commitment period through domestic action undertaken after 1993, if demonstrated by the Party in a verifiable manner and subject to the expert review process to be developed under Article 8[10].

Option 3: The overall 'cap' on the use of the three mechanisms should not exceed 25-30 per cent as a maximum[20].

Option 4: No determination of the term "supplemental"[4].

Option 5: It is necessary to set limits on the use of mechanisms to meet emission targets in the first commitment period. However, if objective criteria to prevent hot air are established, it might be reasonable to remove limits in the second and third commitment periods[19].

Option 6: There are no limits on the transfer of emission surpluses achieved during the period between the time the Protocol enters into force and the first commitment period[18].

D. Participation

152. Option 1: A Party included in Annex I shall be eligible to transfer or acquire AAUs under the provisions of Article 17, if the Party:

(a) Has ratified the Protocol[10,24];

(b) Is bound by a compliance regime adopted by the COP/MOP[10];

(c) Has not been excluded from participation in emissions trading according to the procedures and mechanisms under the compliance regime mentioned in (b) above[10,11,13,24];

(d) Has had its national inventory certified by an accredited independent entity according to international standards agreed by the COP [COP/MOP] (depending on the rules agreed for in-depth review under Article 8 and the standards for national inventory systems under Article 5, this may not be necessary)[24];

(e) Maintains a national registry that complies with the provisions of Appendix C[11,19];

(f) Is in compliance with the provisions of Articles [3[11,13]] 5 and 7 of the Protocol [and Article 12 of the Convention][10,11,13,19,24].

Option 2: A Party may not participate in emissions trading under Article 17 if it is found:

(a) Not to be in compliance with its obligations under Articles 5 and 7[4];

(b) Not to be maintaining a national registry, in accordance with Appendix C[4].

153. If a Party's consistency with the above requirements is called into question [by the review process under Article 8[4]] [by other means[4]], the issue will be expeditiously resolved [through a general procedure applicable to the Protocol[4]] [through a specialized procedure[4]][4].

(Note: The brackets in the above paragraph were submitted by the Parties as options.)

154. Changes in a Party's eligibility to trade or changes pertaining to new entrants that meet the eligibility criteria may occur during the current commitment period[10].

155. Option 1: A Party included in Annex I may authorize legal entities to participate in emissions trading under its responsibility if the Party:

(a) Is eligible to participate in emissions trading[10];

(b) Has established and maintains a national system for accurate monitoring, verification, accountability and allocation of AAUs to legal entities[10,18,24] and for controlling the effects of trade on the Party's assigned amount[18]. Guidelines on the establishment, maintenance and international compatibility of these national systems are included in Appendix A[10,24];

Legal entities authorized by a Party to participate in emissions trading under Article 17 may transfer and acquire excess AAUs under the same principles, modalities, rules and guidelines as the Parties[24].

Option 2: A Party may authorize its legal entities to transfer and acquire AAUs and shall ensure that such participation is consistent with [the principles, modalities, rules and guidelines applying to Parties[4]] [international guidelines for legal entities[19]].

156. A Party that authorizes its legal entities to transfer or acquire AAUs shall remain responsible for fulfilment of its obligations under the Protocol[4,10,19,24].

E. Share of proceeds

157. A specified percentage of the [AAUs transferred][value of each emissions trading transaction] will be contributed to help meet administrative expenses and the adaptation needs of [the most vulnerable] developing country Parties[3,5,7,8,17,21,25,26]. The share of proceeds to assist in meeting adaptation costs shall be the same as for the provisions in paragraph 8 of Article 12[7].

II. METHODOLOGICAL AND OPERATIONAL ISSUES

A. Modalities of operation

158. Option 1: Transfers and acquisitions of AAUs could be effected through bilateral or multilateral arrangements between the Parties involved[6] [without creating a new international business transaction system or regime[6]].

Option 2: Transfers and acquisitions of AAUs between Parties may take place through an exchange[10]. This exchange shall also be open to legal entities[10].

159. Option 1: Units surplus to plan: Emissions trading under Article 17 shall operate under an annual post-verification trading system limited to AAUs determined to be surplus to a Party's allocation plan[24]. Each Party that wishes to undertake transfers under Article 17 shall allocate its total assigned amount among the five years of the commitment period and notify the secretariat of these annual allocations prior to the start of the commitment period[24]. A Party can at any time adjust its annual allocation for the remaining years of the commitment period by notifying the secretariat in advance of the year(s) in question[24]. The assigned amount allocation to any single year should not exceed plus or minus 20 per cent of the total assigned amount divided by five[24].

Excess AAUs for a given year shall be calculated as follows[24]:

(a) Cumulative assigned amount allocation from the beginning of the commitment period through the given year minus cumulative emissions from the beginning of the commitment period through the given year[24];

(b) In addition, the amount of excess AAU certificates issued for previous years of the commitment period and cumulative ERUs transferred under Article 6 must be subtracted to

obtain the annual excess AAUs.[24] Holdings of ERUs and CERs shall not be included in the calculation.[24]

The secretariat shall verify the availability of excess AAUs and issue certificates for them[24]. All issued certificates shall be valid on the market without any liability or trade-specific compliance rules[24].

Option 2: Compliance reserve: A portion [x per cent] of every transfer of AAUs under Article 17 shall be placed in a compliance reserve[10]. These AAUs may not be used or traded[10]. The secretariat, as part of the annual compilation and accounting of emissions inventories and assigned amounts under Article 8, shall include information on the AAUs deposited in the compliance reserve[10]. At the end of the commitment period, such AAUs shall be returned to the Party of origin if that Party is in compliance with its commitments under Article 3, in which case the AAUs can be transferred or banked for future commitment periods[10]. If, at the end of the commitment period, a Party is not in compliance with its commitments under Article 3, an appropriate number of units deposited in the reserve account shall be invalidated, in which case they may not be further used or traded[10].

Option 3: Surplus units: Only excess reductions may be transferred and acquired under Article 17[13]. The assigned amount is the emission reduction commitment of a developed country Party[13]. If a developed country Party is able to reduce its greenhouse gas emissions over and above its reduction commitment, such excess reduction may be transferred to any other Party[13].

160. Any Party wishing to transfer or acquire AAUs must publish the amount to be transferred prior to the transfer[10].

161. Arrangements made among subsets of Parties, including within regional economic integration organizations, should be subject to the oversight of, and be accountable to, the COP/MOP[3].

B. Verification

162. Each Party included in Annex I participating, or authorizing any legal entity to participate, in emissions trading must:

(a) Establish a national system for managing and monitoring emissions trading. Internal verification must be carried out before reports are submitted to the COP/MOP[18];

(b) Arrange for certification of the national inventory by an accredited independent entity according to international standards agreed by the COP [COP/MOP][24];

(c) Maintain compliance with its obligations under Article 5 and 7[4];

(d) Maintain a national registry in accordance with the provisions of Appendix C[4].

163. A Party's consistency with the emissions trading related requirements should be reviewable, initially by the Article 8 expert review process and subsequently, if appropriate, by a suitable procedure under the Protocol's compliance regime[4].

164. The secretariat verifies the availability of excess AAUs and issues certificates for them, denominated in units of one ton of CO_2 and with unique serial numbers that include the Party of origin and the commitment period for which the units are issued[24]. All issued certificates are valid on the market without any liability or trade-specific compliance rules[24].

C. Issues related to compliance

165. Option 1: Buyer liability: If a Party included in Annex I is in non-compliance with its commitments, that part of the assigned amount that has been 'transferred' in accordance with Article 17 shall be invalidated[11].

166. Option 2: Shared liability: If a Party is found to be in non-compliance with its commitments under Article 3, a portion [x per cent] of any of its AAUs that have been transferred to other Parties under the provisions of Article 17, shall be invalidated and cannot be used for the purpose of meeting commitments under Article 3 or further traded[10,18]. [The portion [x per cent] to be invalidated shall be some multiple of the degree of non-compliance[10]. The degree of non-compliance is the percentage difference between emissions in the commitment period and the assigned amount[10].]

Option 3: Seller liability: A Party whose actual emissions for the commitment period exceed its assigned amount (adjusted for transfers and acquisitions of AAUs, ERUs and CERs) after the compliance deadline will be subject to the provisions of the compliance regime adopted by the COP/MOP[2].

(Note: Option 3 is frequently mentioned in discussions on this subject and is therefore included here for purposes of completeness only.)

Option 4: 'Trigger': If a question is raised concerning a Party's compliance with its commitments under Article 3 and the Party is subsequently found to be in non-compliance, any AAUs that have been transferred to other Parties under the provisions of Article 17 after the point in time at which the question was raised shall be invalidated and cannot be used for the purpose of meeting commitments under Article 3, or further traded[10]. Such questions can only be raised in particular circumstances to be defined[10].

167. A Party or legal entity that exceeds its assigned amount at the end of the commitment period may not transfer AAUs to another Party, but may acquire AAUs from another Party[19]. At

the end of each commitment period, there shall be a [short time period[4]] during which Parties have the opportunity to cure any emissions overage (e.g. through acquiring AAUs)[4,19].

168. A Party operating under Article 4 [may[4]] [may not[4]] acquire any ERUs resulting from projects under Article 6 if another Party operating under the same Article 4 agreement, or if a regional economic integration organization to which the Party belongs and which is itself a Party to the Protocol, is found not to be in compliance with its obligations under Articles 5 and 7[4].

(Note: The matter in the above paragraph was raised by the Parties as an issue to be addressed, but not as a proposal.)

169. If a question of implementation by a Party included in Annex I of the requirements referred to in the principles, modalities, rules and guidelines relating to Article 17 is identified in accordance with the relevant provisions of Article 8 [or by means of another process[4]], transfers and acquisitions of AAUs may continue to be made after the question has been identified, provided that they may not be used by a Party to meet its commitments under Article 3 until any issue of compliance has been resolved in favour of the Party in question[10]. Such a question shall be expeditiously resolved [through a general procedure applicable to the Protocol[4]] [through a specialized procedure[4]][4].

(Note: The brackets in the above paragraph were submitted by the Parties as options.)

(Note: A group of Parties, in their joint submission, raised the question of the need to address the issue of whether a Party whose emissions exceed its assigned amount for the previous commitment period should retain its eligibility to participate in emissions trading under Article 17 in the subsequent commitment period.)

D. Registries

170. Option 1: Any Party participating in [or authorizing any legal entity to participate in[10,24]] emissions trading shall establish and maintain a national registry[4,10,11,18,24] which accurately records all holdings, transfers, acquisitions [and retirements[4,24]] of [excess[24]] AAUs by the Party and its authorized legal entities[4,10,24].

Option 2: A central registry shall be established with the aim of tracking the generation, transfer and retirement of AAUs, CERs and ERUs transferred under the Protocol mechanisms[3].

171. Upon verifying the availability of excess AAUs and the issuance of certificates for them by the secretariat, excess AAUs shall be subtracted from the assigned amount of the relevant Party[24]. The secretariat shall undertake this transaction by transferring the serial numbers for the certified excess AAUs to the Party's registry[24]. In turn, an equal number of AAUs shall be retired from the Party's assigned amount[24].

172. Transfers and acquisitions of AAUs shall be made by removing AAUs (identified by serial number) from the registry of the transferring Party and adding them to the registry of the acquiring Party[4].

173. AAUs used by a Party toward meeting its commitment under Article 3, paragraph 1, shall be retired by that Party, in which case such units may not be further used or transferred[1]. A record of all retired AAUs (identified by serial number) shall be kept by the Party in its registry[4].

174. Information maintained in a national registry shall be publicly accessible[4,10,19] through the internet[19]. Guidelines on the establishment, maintenance and international compatibility of national registries are included in Appendix C[10,19,24] and include a standard electronic database system[19].

175. Any two or more Parties may voluntarily maintain their registries in a consolidated system, within which each registry would remain legally distinct[4].

E. Reporting by Parties

176. Each Party participating in, or authorizing any legal entity to participate in, emissions trading shall include in its annual submission to the secretariat under Article 7, paragraph 1[10,11,24], *inter alia*, information, in a standard electronic format[4], on:

(a) Transfers and acquisitions of AAUs during that year, including, for each unit, the serial number and the Party's registry to which it was transferred or from which it was acquired[4,10,11,18];

(b) Any AAUs (identified by serial number) that have been retired that year[4,18].

177. As part of the annual compilation and accounting of emissions inventories and assigned amounts under Article 8, the secretariat shall present a publicly available synthesis of the reports by Parties on transfers and acquisitions of AAUs during such year, including which AAUs have been used by a Party for purposes of compliance with Article 3, paragraph 1[4,10,19]. It shall provide Parties with the opportunity to investigate and correct any discrepancies in the recording of transfers of assigned amounts[4]. The synthesis shall reflect any remaining discrepancies[4].

III. INSTITUTIONAL ISSUES

A. Role of the COP and/or the COP/MOP

178. Emissions trading is subject to the authority and guidance of the [COP] COP/MOP[3].

179. The [COP] [COP/MOP] shall:

(a) Define the roles of verification and auditing entities, including private sector entities[3];

(b) Issue guidelines on national allocation and accountability procedures for legal entities[24];

(c) Issue guidelines on the establishment of national registries[24];

(d) Determine the share of proceeds, if any, to be imposed on transfers of AAUs to meet administrative expenses and to help meet the adaptation needs of the most vulnerable developing country Parties[2];

(e) Track the potential for distortion of competition and include standard checks in the guidelines[22].

180. Any smaller bodies authorized to carry out executive functions on behalf of the [COP] [COP/MOP] must have a membership that reflects the unique representational balance established by the practice of the Parties (such as the COP Bureau)[3].

B. Parties

181. A Party participating in Article 17 shall:

(a) Establish and maintain a national system for accurate monitoring, verification, accountability and allocation of AAUs to legal entities[10,18,24] and for controlling the effects of trade on the Party's assigned amount[18];

(b) Establish and maintain a national registry containing records of holdings, transfers, acquisitions, [transfer prices[19]] and retirements of AAUs by the Party itself and legal entities resident in the Party in accordance with the guidelines in Appendix C[4,10,11,18,19,24], through the standard electronic database system accepted by the COP/MOP[19];

(c) Maintain an up-to-date list of legal entities resident in that Party authorized to participate in emissions trading under Article 17 and make it available to the secretariat and the public[10,19];

(d) Report annually on activities under Article 17 [to the secretariat[19]] in accordance with guidelines adopted by the [COP] [COP/MOP][4,10,11,18,24];

(e) Ensure that resident legal entities authorized to participate in emissions trading under Article 17 comply with applicable rules and procedures[2].

C. Administrative support

182. The secretariat established by Article 8 of the Convention shall serve as the secretariat for administration of emissions trading under Article 17[2].

183. The secretariat shall make information on the Parties that are eligible to participate in international trade publicly available[10].

D. Review

184. The COP [COP/MOP] shall review the principles, modalities, rules and guidelines governing the operation of the emissions trading system[10]. The first review shall be carried out no later than the year 2012[10]. Further reviews shall be carried out periodically thereafter[10].

185. Changes in principles, modalities, rules and guidelines shall take effect in commitment periods subsequent to that of their adoption[10]. Changes in a Party's eligibility to trade or changes pertaining to new entrants that meet the eligibility criteria may occur during the current commitment period[10].

Appendices to Part Four

APPENDIX A:

National systems[10]

APPENDIX B:

Reporting[2]

APPENDIX C:

Registries[2]

Annex I

ARTICLE 6 OF THE KYOTO PROTOCOL

1. For the purpose of meeting its commitments under Article 3, any Party included in Annex I may transfer to, or acquire from, any other such Party emission reduction units resulting from projects aimed at reducing anthropogenic emissions by sources or enhancing anthropogenic removals by sinks of greenhouse gases in any sector of the economy, provided that:

(a) Any such project has the approval of the Parties involved;

(b) Any such project provides a reduction in emissions by sources, or an enhancement of removals by sinks, that is additional to any that would otherwise occur;

(c) It does not acquire any emission reduction units if it is not in compliance with its obligations under Articles 5 and 7; and

(d) The acquisition of emission reduction units shall be supplemental to domestic actions for the purposes of meeting commitments under Article 3.

2. The Conference of the Parties serving as the meeting of the Parties to this Protocol may, at its first session or as soon as practicable thereafter, further elaborate guidelines for the implementation of this Article, including for verification and reporting.

3. A Party included in Annex I may authorize legal entities to participate, under its responsibility, in actions leading to the generation, transfer or acquisition under this Article of emission reduction units.

4. If a question of implementation by a Party included in Annex I of the requirements referred to in this Article is identified in accordance with the relevant provisions of Article 8, transfers and acquisitions of emission reduction units may continue to be made after the question has been identified, provided that any such units may not be used by a Party to meet its commitments under Article 3 until any issue of compliance is resolved.

Annex II

ARTICLE 12 OF THE KYOTO PROTOCOL

1. A clean development mechanism is hereby defined.

2. The purpose of the clean development mechanism shall be to assist Parties not included in Annex I in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3.

3. Under the clean development mechanism:

(a) Parties not included in Annex I will benefit from project activities resulting in certified emission reductions; and

(b) Parties included in Annex I may use the certified emission reductions accruing from such project activities to contribute to compliance with part of their quantified emission limitation and reduction commitments under Article 3, as determined by the Conference of the Parties serving as the meeting of the Parties to this Protocol.

4. The clean development mechanism shall be subject to the authority and guidance of the Conference of the Parties serving as the meeting of the Parties to this Protocol and be supervised by an executive board of the clean development mechanism.

5. Emission reductions resulting from each project activity shall be certified by operational entities to be designated by the Conference of the Parties serving as the meeting of the Parties to this Protocol, on the basis of:

(a) Voluntary participation approved by each Party involved;

(b) Real, measurable, and long-term benefits related to the mitigation of climate change; and

(c) Reductions in emissions that are additional to any that would occur in the absence of the certified project activity.

6. The clean development mechanism shall assist in arranging funding of certified project activities as necessary.

7. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session, elaborate modalities and procedures with the objective of ensuring

transparency, efficiency and accountability through independent auditing and verification of project activities.

8. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall ensure that a share of the proceeds from certified project activities is used to cover administrative expenses as well as to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation.

9. Participation under the clean development mechanism, including in activities mentioned in paragraph 3(a) above and in the acquisition of certified emission reductions, may involve private and/or public entities, and is to be subject to whatever guidance may be provided by the executive board of the clean development mechanism.

10. Certified emission reductions obtained during the period from the year 2000 up to the beginning of the first commitment period can be used to assist in achieving compliance in the first commitment period.

Annex III

ARTICLE 17 OF THE KYOTO PROTOCOL

The Conference of the Parties shall define the relevant principles, modalities, rules and guidelines, in particular for verification, reporting and accountability for emissions trading. The Parties included in Annex B may participate in emissions trading for the purposes of fulfilling their commitments under Article 3. Any such trading shall be supplemental to domestic actions for the purpose of meeting quantified emission limitation and reduction commitments under that Article.

Annex IV

CODE OF SOURCES

1 Text from the Kyoto Protocol
2 Proposals from the Chairmen
3 Alliance of Small Island States
4 Australia, Canada, Iceland, Japan, New Zealand, Norway, the Russian Federation, Ukraine and the United States of America
5 Burkina Faso
6 China
7 Costa Rica
8 The Gambia
9 Georgia
10 Germany, on behalf of the European Community and its member States and Bulgaria, Croatia, the Czech Republic, Hungary, Latvia, Poland, Romania and Slovenia; and Germany, on behalf of the European Community, its member States and Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, the Slovak Republic and Slovenia;
11 Group of 77 and China
12 Guatemala
13 India
14 Mauritius
15 Mexico
16 Nigeria
17 Peru
18 Poland
19 Republic of Korea
20 Saudi Arabia
21 Sierra Leone
22 South Africa
23 Sudan
24 Switzerland
25 Togo
26 Uganda
27 Uzbekistan

- - - - -

UNITED NATIONS

Framework Convention on Climate Change

Distr.
GENERAL

FCCC/SB/1999/8/Add.1
24 October 1999

ENGLISH ONLY

SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE
Eleventh session
Bonn, 25 October - 5 November 1999
Item 6 of the provisional agenda

SUBSIDIARY BODY FOR IMPLEMENTATION
Eleventh session
Bonn, 25 October - 5 November 1999
Item 6 of the provisional agenda

MECHANISMS PURSUANT TO ARTICLES 6, 12 AND 17 OF THE KYOTO PROTOCOL

Synthesis of proposals by Parties on principles, modalities, rules and guidelines

Note by the Chairmen

Addendum

CONTENTS

	Paragraphs	Page
Introduction	1 - 2	3
I. APPENDICES TO PART TWO: ARTICLE 6 PROJECTS		3
A. Baselines		3
B. Monitoring, reporting, verification and certification/issuance of ERUs		3
C. Registries		3

		Paragraphs	Page
II.	APPENDICES TO PART THREE: CLEAN DEVELOPMENT MECHANISM	3 - 55	3
	A. Baselines	3 - 18	3
	B. Validation/registration	19 - 46	6
	C. Monitoring, reporting, verification and certification/issuance of CERs	47 - 49	13
	D. Registries	50	14
	E. Procedures for the operation of the executive board	51 - 53	14
	F. Guidelines for operational entities		16
	G. Disbursement of the share of proceeds	54 - 55	16
	H. Adaptation		16
III.	APPENDICES TO PART FOUR: EMISSIONS TRADING	56 - 60	16
	A. National systems		16
	B. Reporting		16
	C. Registries	56 - 60	16

Introduction

1. This addendum contains a compilation of proposals by Parties, identified by sources, on issues to be covered in the appendices referred to in the revised and consolidated synthesis of proposals by Parties prepared by the Chairmen of SBSTA and SBI (FCCC/SB/1999/8). Some of the proposals presently allocated to parts two to four of the document may eventually be transferred to these appendices and vice versa.

2. Submissions received prior to and during the tenth sessions of the subsidiary bodies are contained in document FCCC/SB/1999/MISC.3 and its addenda. Further proposals are contained in document FCCC/SB/1999/MISC.10 and Add.1.

I. APPENDICES TO PART TWO: ARTICLE 6 PROJECTS

A. Baselines

B. Monitoring, reporting, verification and certification/issuance of ERUs

C. Registries

(Note: A detailed submission by New Zealand on national registries, including features for their design and associated reporting requirements, is contained in document FCCC/SB/1999/MISC.3).

II. APPENDICES TO PART THREE: CLEAN DEVELOPMENT MECHANISM

A. Baselines

3. Methodologies for calculating emissions reductions or removals will be critical to the success of the CDM. For projects to be registered under the CDM, baselines will need to be established. Baselines methodologies will need to provide a basis for ensuring that reductions or removals are real, measurable, and have long-term mitigation and/or sequestration benefits that would not have occurred in the absence of the certified project activity. **(Australia et al.)**

4. To date, baseline discussions have focussed on two approaches: project-by-project and standardized baselines. [...] Experience gained from the AIJ pilot phase on baselines will also be helpful. **(Australia et al.)**

5. How additionality is assessed will depend on which methodologies a project developer uses. Under a project-by-project approach, developers would have to establish a base case against which the project's emissions will be compared. If the project's emissions are below the

case by case, then it would be considered additional. Standardized baselines for a type of project, for example benchmarking, could be developed to distinguish between those activities that generate GHG reductions in excess of the baseline and those that do not. Activities that perform better than the benchmark would automatically be considered additional. Transaction costs and reporting requirements are likely to vary by the approach taken. **(Australia et al.)**

6. Methodologies for Calculating Reductions in Emissions by Sources and/or Enhancements of Removals by Sinks - including for establishing baselines (must include requirements for information to be provided to the operational entities, including background documentation and data needed for the operational entities to approve/accept the baseline). **(Australia et al.)**

7. There is a need to establish at the project level a baseline which reflects the "no project" scenario, "what would have happened in the absence of the project activities". This reference should be decisive in quantifying the emission reductions that are available for a transaction. **(Costa Rica)**

8. The difference between the baseline and the project's emissions or removal scenario will determine the net environmental benefit in terms of emission reductions. **(Costa Rica)**

9. On grounds of environmental effectiveness, the baseline used must be strictly the best available, although in some cases in particular it will be necessary to use projections from a specific sector of the economy. **(Costa Rica)**

10. Baselines, once certified, should remain static for the lifespan of the project. However, the baseline by sector may be revised periodically if the CDM Executive Board so decides, for subsequent application to new projects. **(Costa Rica)**

11. The establishment of baselines for determining the emissions reduced must be on a project-by-project basis for quantifying the level of emissions that most likely would have occurred in the absence of certified project activity. **(India)**

12. It is important to consider the regional differences for the baseline calculation, being for that pertinent the baseline adoption from the average of the technology types applied in the region. For regional average calculation to be used for the clean development mechanism as well as for joint implementation, Annex II countries to the Convention will be excluded in the calculation. To determine CO_2 equivalent metric tons reduction, regional average emissions are compared with the above-mentioned project technology emissions. **(Peru)**

13. For the calculation of the emission reduction units (ERUs) in the case of joint implementation or certified emission reductions (CERs) in the case of the clean development mechanism, the procedure will be as follows:

(a) The difference between project emission levels and the OECD average will be converted in emission reduction units (ERUs) or certified emission reductions (CERs), for the benefit of the Annex I country, as appropriate,

(b) CO_2 equivalent metric tons reduced that are not assigned to the investor country, will form part of a future options system for the country in which the project is accomplished. **(Peru)**

14. As an example: Consider a power plant fuel conversion in Peru. The Latin America average is 550 units. The OECD average is 450 units and the CDM/JI project emits 400 units. The credits accruing from this projects for an Annex I Party would be 450 units-400 units=50 units. The 100 units representing the difference between the Latin American Average and the OECD average, which are not assigned to the Annex I country, are banked by the recipient country. **(Peru)**

15. *Real, measurable and long-term environmental benefits*: These criteria should be complied with by each JI and CDM project. In result of their implementation, emission reduction of greenhouse gases should effect really, and its amount must be greater than any measurement error or than any estimate. Reduction should be sustainable in character and it must long for all the period of effects from implemented technology. Such reductions also cannot result in the increase in emissions from remaining production plants of the same sector (i.e. elimination of „leakage" by means of making impossible to transfer an old technology to another plant). **(Poland)**

16. *Criteria for real, measurable and long-term benefits related to counteracting the climate change*: One of the proposals for indirect assessment of these benefits is the assessment of reduction achieved by JI and CDM projects. Such projects should:

(a) Secure reduction, that will be essential in relation to reference scenario, i.e. it will exceed the error level of emission estimates;

(b) Include only such projects, whose emission amount is measurable or it is possible to its assessment;

(c) Lower emission resulting from project should be stable and it should sustain during lifetime of implemented technology. **(Poland)**

17. Reference scenarios constitute the basis for assessment of additionality. Because of this reason, the matter of development of methodological basis becomes particularly important.

For both mechanisms (CDM and AIJ) a joint methodology should be established. It is possible to set-up a reference level based on macroeconomic development prognosis for economic growth, growth in population and other factors, but this is difficult to determine in a reliable way. Moreover, such information is less useful for individual projects. Therefore, it is necessary to develop methods for the development of such scenarios. **(Poland)**

18. A baseline would be defined at national levels by countries [as per national communications] **(South Africa)** [possibly backed by] **(Sierra Leone)**/ [combined with] **(South Africa)** project-by-project baselines. **(Sierra Leone, South Africa)**

B. Validation/registration

19. Modalities and Procedures for Registration – including provision of information to operational entities, protection of proprietary information by operational entities, and provision for payment to operational entities for fees and expenses for project registration and certification, as set forth in Appendix A. **(Australia et al.)**

20. Methodologies for Calculating Reductions in Emissions by Sources and/or Enhancements of Removals by Sinks - including for establishing baselines (must include requirements for information to be provided to the operational entities, including background documentation and data needed for the operational entities to approve/accept the baseline). **(Australia et al.)**

21. That the amount of tons of CO_2 equivalent — or other unit that will finally be adopted to express the reductions claimed in the CERs generated by a project activity— should be sanctioned by the Parties to the Protocol, considering adequate error limits compatible with the accomplishment of FCCC objectives. **(Chile)**

22. The authority for any statement on the issue of sustainability of CDM projects, resides in the sovereign decisions adopted by the CDM national regulatory entities that will be set up in the Parties where the projects will take place. The international regulatory authority (i.e., the Executive Board) will only make a declaration, if necessary, on the consistency between the sustainability claims of CDM projects and the international agreements that deal with the issue of sustainable development. **(Chile)**

23. The eligible activities must be compatible with those activities noted in Article 3.3 and 3.4 of the Kyoto Protocol. **(Chile)**

24. For every project that fulfils the criteria established by the COP/MOP in order to become part of the CDM and be validated by the corresponding authorities of the CDM, a participating Party can request the retroactive verification and accreditation of the emission reductions gained since the initiation of the project, but not before the Party where the project took place had ratified the Protocol, and never before the year 2000. **(Chile)**

25. Financial additionality is derived from the concept of environmental additionality and relates to whether the project activity would have existed in the absence of economic valuation and internalization of the emission reductions from the project which are being acquired by the investor from the Party included in Annex B to the Kyoto Protocol. **(Costa Rica)**

26. Financial additionality should be quantified in terms of impact of the economic valuation of the emission reduction on the project finances. It will be necessary to compare financial indicators (internal rate of return, net present value and equivalent annual value), drawn up in the light of the flows of funds with and without the economic valuation of the emission reductions from the project during its lifespan. **(Costa Rica)**

27. The establishment of a certification process should be complemented, at the project level, by a system of guarantee against risks which will ensure the continuance of the real mitigation effects during the specific period of certification. **(Costa Rica)**

28. In view of the above, risk analysis should form part of the minimum requirements for certification and should be the ultimate responsibility of the executive board. **(Costa Rica)**

29. REQUIREMENTS FOR PROJECTS PRESENTED UNDER THE OGCDM

I) Political Institutional

I a) Congruent with the political standards of the host country for the sectors involved.

I b) Respect for the host country's legal framework.

I c) Promote the active participation of the social actors involved, in the design and execution of projects.

II) Socioeconomic

II a) Direct influence of the project in the socioeconomic situation of the area of influence and the host country.

II b) Diffusion of the projects' scope beyond itself.

II c) Additional effects (indirect) of the execution and functioning of the project.

III) Technical

III a) Environmental service. Net effect on the reduction of GHG (Calculation of baseline, fixation net results of the project, additionality, permanence, and leakage).

III b) Quantification of reduced, avoided or sequestered emissions.

III c) Clearly define:

- Baseline
- Additionality
- Monitoring plan
- Verification

III d) Explain the negative effects to be produced in the absence of the project.

III e) Present calculus digest.

IV) Economic and financial

IV a) Financial and economic analysis. (IRR, reserve funds, financial flow)

IV b) Estimates of the integral costs of implementation and maintenance of the project for the duration of the compromise.

IV c) Indicate additional sources of financing.

V) Others

V a) Contribution to the sustainable development of the host country.

V b) Technology transfers from the Annex I Party to the host country.

V c) Contribution to the Bio-diversity according the type of the project. **(Guatemala)**

30. The issue of criteria for real, measurable and long-term benefits related to climate change, which is related to the issue of climate change effectiveness, should be addressed by taking into account the additional reduction in emissions at the CDM project level as against the baseline of the CDM project activity. The benefits related to a project activity would be recognized as real if the actual greenhouse gas (GHG) emissions can be shown to be less than the project baseline. The benefits would be recognized as measurable if the actual level of GHG emissions of the project case and the level of GHG emissions in the project baseline can be established with a reasonable degree of certainty. The benefits of a project activity would be recognized as long-term if the emission reduction persists over an appropriate period of time taking into account the differences in the life-spans of different CDM project activities, and bearing in mind Article 2 of the Convention. **(Group of 77 and China)**

31. As suggested in the previous submission, Korea considers that CDM projects should meet the following additionality conditions:

(a) Emissions additionality: CDM projects should achieve real, measurable and long-term GHG emission reductions;

(b) Investment additionality: Projects which are commercially viable without emission credits should not qualify as CDM projects;

(c) Financial additionality: Official Development Assistance (ODA) projects should not be considered as CDM projects; and

(d) Technology additionality: Technology for CDM projects should be appropriate for non-Annex I Parties and meet best available technology standards. **(Republic of Korea)**

32. Among the above additionality conditions, investment additionality deserves greater attention. If there is no distinction between Foreign Direct Investment (FDI) and CDM investment, FDI, which takes place on a commercial basis even without emission credits, could be repackaged as CDM investment, and obtain emission credits. This will result in an overflow of emission credits, which will have adverse effects on global efforts to fight against climate change. **(Republic of Korea)**

33. Distinguishing between FDI and CDM investment is not an easy task and requires further elaboration. Korea, however, considers that the concept of concessionality which applies to ODA can be considered as an exemplary criterion. According to OECD/DAC (Development Assistance Committee), ODA is required to have a "grant element" of at least 25 per cent. Additionally, the concept of the normal internal rate of return can also be considered to be a criterion for distinguishing FDI and CDM investment. Investment made below the level of the normal internal rate of return should be considered as CDM investment. **(Republic of Korea)**

34. An approved project should be registered and the emission reduction avoidance to be achieved recorded as the starting point for certification of project performance. In order to give effect to this proposal, guidelines are required for project approval procedures. **(South Africa)**

35. The project proposal should contain the information covering the following issues:

(a) Additionality (extent to which emissions would be reduced and sustainable development promoted relative to the situation in the absence of the project);

(b) Sustainable development indicators;

(c) Baseline: Internationally agreed criteria are required;

(d) Impact analysis;

(e) Confirmation of local stakeholders involvement;

(f) Externalities beyond the host country borders;

(g) Confirmation that adequate local capacity exists or will be developed;

(h) Potential for long term climate mitigation;

(i) Supplementarity (extent to which achievements of emission reduction targets of Annex B country, to be met by domestic action, are supplemented by the project);

(j) Baseline and project scenario (this includes the level of sustainable development indicators before certification of the project);

(k) Technology viability;

(l) Confirmation of secured financing (except in cases where assistance in terms of Article 12.6 [of the Kyoto Protocol] is being requested in which case the request will be included);

(m) Monitoring protocol:
- What is monitored;
- Methodology to be used;
- Reporting requirements; and
- Calibration of test and measuring equipment; and

(n) Time frame for verification and certification. **(South Africa)**

36. Annex I Parties participating in any of the three flexible mechanisms must give concrete information that their ODA flows is not declining as a result of their participation in any of the flexible mechanisms. **(Uganda)**

37. The baseline is a foundation for the calculations of GHG emission reduction and incremental costs. In order to determine the baseline for each of the projects a scenario is worked out taking into consideration of the existing processes and what will most likely occur in future in the case of business as usual. The calculation of the project baseline is carried out by the way of evaluation of existing GHG emission level with the actual production capacity and technical performances of an enterprise (Fig. 2). Being the basis for the calculation of the GHG emission reduction and abatement cost the project baseline requires thorough determination. **(Uzbekistan)**

38. The final baseline will make a basis for the contract between the investor and the enterprise implementing the project. The baseline set up at the beginning of the project remains unchanged during the whole period of project implementation. Under project registration the reliability of the baseline has to be checked by: Uzbekistan National Strategy Study (UzNSS) Steering Committee and within emissions reduction certification by an operational entity to be designated by the Conference of the Parties. **(Uzbekistan)**

39. In addition, while making the calculation of the project baseline the existing development plans of the enterprise which can result in GHG emission reduction beyond the boundaries of project implementation have to be taken into consideration. In this case the correction of the project baseline and the appropriate GHG emission reduction is to be carried out. For example, it can be corrected in case of production capacity increase or strengthening of the existing tariff policy. **(Uzbekistan)**

40. Within an identification of the baseline both investor and project promoter will be interested in possible increase of the GHG emission reduction units, that is why during its determination they will try to increase the actual scope of productive capacities resulting in GHG emissions. In order to avoid this it is necessary:

(a) To check up the project baseline reliability being performed by UzNSS Steering Committee under the project registration;

(b) To publish the baseline through Web site before signing of contract that allows to contest the agreement by third side;

(c) To reduce crediting time to interval provided the most objective determination of the baseline;

(d) To check up the baseline within GHG emission reduction certification by an operational entity to be designated by the Conference of the Parties. **(Uzbekistan)**

41. The project sides should establish proper system boundaries which would be approved by the government of the investing country and of Uzbekistan for more precise determination of the baseline. **(Uzbekistan)**

42. Under system boundaries notion is implied the scope of analyses within the limits of which fulfils the assessment of the project outputs. The system boundaries can be defined by the scale of proposed activity - productive unit, enterprise, a number of enterprises and etc. Under defining system boundaries it is necessary to reveal the factors affected significantly on the results of the project implementation, and first of all the baseline. **(Uzbekistan)**

43. In order to determine the GHG emission reduction achieved by the project it is necessary to determine the difference between the GHG emission of the baseline and project emission [...] The volume of GHG emission reduction can be banked during the whole life time of the given production while certified emission reduction for the project are only calculated for crediting time. The results of the calculations are determined by the system boundaries. The methodology approved by IPCC is used for GHG emission calculation. **(Uzbekistan)**

44. *The barrier approach:* The GHG emission reduction is taken into account for crediting in CDM projects only in case if it is additionality, i.e. this reduction does not occur in the absence of the project activity. In order to evaluate additionality principle the barrier approach can be applied which was worked out by the International Energy Agency and adopted for the JI projects in the National Strategy Study (NSS) projects. **(Uzbekistan)**

Table 1

Potential barriers	**Examples of barries**
Technological	Risks for provision of the technical service for equipment Risks for project realization
Organizational/legal	Risk of delay of the project realization beginning Substantial obstacles for receiving of direct investment Subsidies for the natural gas or heat
Financial	Shortage of the long-term capital High cost of the capital Exchange rate risks
Market	Raw material supply risks Vagueness of the prices trends for the energy carriers
Employees qualification	Weak mastering of the technologies Shortage of the qualified staff Shortage of the information about the project possibilities
Ecological	Increase of the air and water pollution Reduce of industrial waste

The barrier approach is based on the following principles:

(a) The GHG emissions offsets can be subject for CDM crediting if reduction has been achieved additionality as a result of the activity, which is impossible without additional financial investments? Technology transfer and "know-how".

(b) Projects directed to the GHG emission reduction can face different barriers: technical, financial, organizational, legal, technological, etc. in the course of their implementation.

(c) In order to meet additionality criteria the CDM project has to have certain barriers which are absent in the project baseline. At least one of the barriers should be serious.

(d) Most of the possible barriers could be broken down due to attraction of the investment. Taking into consideration the economical situation in Uzbekistan financial viability of the project can be considered as dominating factor in the evaluation of additionality. **(Uzbekistan)**

45. To data the major barrier of Uzbekistan is the limitation and high price for the investment. The commercial banks are not interested in granting credits to the investment projects aimed at environmental improvement because of the low economical effectiveness and long-term viability. **(Uzbekistan)**

46. *Additionality assessment:* Initially the financial analysis is carried out assuming the availability of the favourable local conditions for financing without taking into consideration the profit from the sale of the transferable emission reduction units. If the project has negative net cost, i.e. one main barrier is revealed, then the project can be considered additional. If the project appears to be notoriously financially viable it is necessary to carry out an analysis of other potential barriers (table 1), to reveal the necessary additional financial means for the breaking down and to include this cost into the project financial analysis. This analysis is carried out till the barrier is revealed, after which the project becomes financially enviable. Its further realization becomes possible only with participation of the external investors which will serve as a confirmation of the additionality principal for the given barrier. For example, the main barriers for Uzbekistan are limitation or absence of the investment, so called financial barrier as well as the absence of the plants manufacturing some types of the equipment which allow to reduce the GHG emissions (boilers for small and middle-size boiler houses, turbine for small hydro-power stations, gas registration devices, energy-effective lighting lamps, etc.) and conducting tariff policy on energy carriers realization. **(Uzbekistan)**

C. Monitoring, reporting, verification and certification/issuance of CERs

47. Costa Rica reaffirms the mandatory nature of monitoring as an internal process of quantification and verification of emission reduction during the lifespan of the project. The quality of the information on emission reductions will depend on the monitoring and verification protocols to be adopted and their implementation at the level of each project in the different sectors of the economy that the parties voluntarily decide to pursue. **(Costa Rica)**

48. On the basis of the effectiveness of the monitoring and verification process in environmental and accounting terms, there is a need to guarantee certain minimum requirements

such as: the application of scientifically approved methodological procedures in accordance with the type of project, standard documentation, consistent records, allocation of responsibilities and provision for non-fulfilment of commitments assumed in each project, *inter alia*. **(Costa Rica)**

49. A uniform reporting format for project-by-project reporting shall be adopted by the COP/MOP. Only projects that have been implemented may be reported. At a minimum, however, the status of implementation has to be indicated. **(Sierra Leone)**

D. Registries

(Note: A detailed submission by New Zealand on national registries, including features for their design and associated reporting requirements, is contained in document FCCC/SB/1999/MISC.3).

50. Information and transparency are key aspects for the effective operation of the CDM. The executive board of the CDM should see to the timely publication of information on trading in emission reductions carried out including *inter alia* dates, type of project, countries participating in the project, date of emission reductions traded, price of the transaction involving certified emission reductions, etc. **(Costa Rica)**

E. Procedures for the operation of the executive board

51. Information and transparency are key aspects for the effective operation of the CDM. The executive board of the CDM should see to the timely publication of information on trading in emission reductions carried out including *inter alia* dates, type of project, countries participating in the project, date of emission reductions traded, price of the transaction involving certified emission reductions, etc. **(Costa Rica)**

52. The principle of transparency must be applied to the executive board. This requires that:

(a) All meetings of the executive board should be open to attendance, as observers, by all Parties and by all accredited observers. The COP/mop should establish rules and procedures for preparation and distribution of the provisional agenda of executive board meetings and for presentations to be made to the executive board by Parties, accredited observers.

(b) There should be provisions concerning the keeping of a record of executive board decisions and requiring the Secretariat to communicate the full text of all decisions to each Party and to the categories of persons and entities that the COP/moP believes should receive them. Provision should be made for decisions to be translated and communicated to Parties in all six official UN languages. **(Saudi Arabia)**

53. Decisions concerning the principles for the: CDM and other basic elements involve consideration of the following:

(a) An understanding must be developed as to what should be the nature and extent of the "supervisory" role of the executive board over the CDM, which is referred to in Article 12.4 of the Protocol. For example, consideration should be given to whether the executive board should: (a) be able to establish rules, guidelines, or procedures that elaborate or implement decisions of the COP/moP; or (b) decide "appeals" taken from decisions or conclusions of the operational entities and/or independent auditors referred to in Articles 12.5 and 12.7, respectively; or (c) play any role (and, if so, what role) regarding: initial or final determinations of whether a project actually is resulting in claimed CERs and, if not, what happens thereafter, (d) be limited to general oversight of the activities of the operational entities and/or independent auditors for the purpose of keeping the COP/moP informed as to how activities are progressing under Article 12; or (e) engage in a combination of some or all of those roles, as well as others. The nature and extent of the executive board's "supervisory' role will affect numerous decisions that should be made by the COPmoP. Among them are:

(i) Provisions governing the frequency and location of ordinary meetings of the CDM executive board and who may call emergency meetings, as well as the circumstances in which emergency meetings may be held.

(ii) Requirements concerning reporting to the executive board by the operational entities and independent auditors,'of their decisions or conclusions; whether Parties and other entities and persons should receive such reports; and whether, and in what circumstances, the reports should be accompanied by the record of information on which they are based and who should be entitled to receive copies of such record of information.

(iii) If a decision of an operational entity to certify, or not to certify, emissions reductions may be "appealed" to the executive board, who may take such "appeal" and the procedures therefore.

(b) An understanding must. be developed as to the implications of the subordination of the executive board to the COP/moP. The nature of the relationship between the executive board and the COP/moP will affect numerous decisions that should be made by the COP/moP. Among them are:

(i) Whether "appeals' may be taken from decisions of the executive board to the COP/moP, which must be considered by the COP/moP. Whether or not such "appeals' are allowed, it must be made dear that the COP/moP is not prevented on its own initiative from reviewing, modifying, or overruling any decision or other act of the executive board.

(ii) If the COPmoP is to review or consider an executive board decision, either on the initiative of theCOP/moP or by reason of an "appeal", the respective roles of the SBI and the SBSTA should be established.

(iii) If such "appeals" are allowed, who may taken them and on what types of issues.

(iv) If such "appeals" are allowed, the time period in which they must be taken and the procedure for COP/mop consideration of the "appeal"

(v) If such "appeals" are allowed, or if the COP/moP on its own initiative reviews or considers an executive board decision, the circumstances in which the decision might be suspended pending completion of COP/moP disposition of the matter. **(Saudi Arabia)**

F. **Guidelines for operational entities**

G. **Disbursement of the share of proceeds**

54. The partition and accounting of these resources, according to the guidelines that should be developed by the COP/MOP, will be managed by the entity operating as the UNFCCC financial mechanism. Therefore, the administration of those resources will not be part of the CDM operational aspects. **(Chile)**

55. The adaptation fund would be used by those non-annex I Parties qualifying as "particularly vulnerable" to the climate change impacts, and their priorities will be established according to a Vulnerability Index set up by the Parties to the Protocol. **(Chile)**

H. **Adaptation**

III. APPENDICES TO PART FOUR: EMISSIONS TRADING

A. National systems

(Note: Germany et al. and Switzerland propose that guidelines be elaborated on the establishment, maintenance and international compatibility of national systems for accurate monitoring, verification, accountability and allocation of AAUs to legal entities (see document FCCC/SB/1999/8, para. 155, option 1).

B. Reporting

(Note: A detailed submission by New Zealand on national registries, including features for their design and associated reporting requirements, is contained in document FCCC/SB/1999/MISC.3).

C. Registries

(Note: A detailed submission by New Zealand on national registries, including features for their design and associated reporting requirements, is contained in document FCCC/SB/1999/MISC.3).

56. A central registry shall be established with the aim of tracking the generation, transfer and retirement of AAUs, CERs and ERUs transferred under the Protocol mechanisms. Any AAU, CER or ERU entered into the system should be clearly identified by its emissions value, date of generation, country of origin, and, in case of the CDM and JI, also the project of origin. Any information held by the registry shall be publicly accessible. **(AOSIS)**

57. National registries. Each Party should maintain records of details of authorized legal entities within its jurisdiction, and such information should be available both to the UNFCCC secretariat and to the public. Parties should track and record up-to-date information on all transfers and acquisitions of AAUs by authorized legal entities within their jurisdiction, through the standard electronic database system accepted by COP/MOP. Parties should also report, at least annually, to the UNFCCC secretariat the amount and serial numbers of the AAUs and the prices of all transfers and acquisitions, and publicize the information through the Internet. **(Republic of Korea)**

58. International registries. The UNFCCC secretariat should establish standard formats and procedures for drafting annual reports and reporting of transactions. The secretariat should also develop a standard electronic database system for the Parties. The UNFCCC secretariat should manage and publicize through the Internet the most up-to-date information on the authorized legal entities, their transactions, and the AAUs they possess. The UNFCCC secretariat should produce, on an annual basis, a tabulation of the adjustments to AAUs for each Party. The secretariat should prepare a report to COP/MOP, assessing the compliance status of the Parties. Such reports should be circulated by the secretariat to all Parties to the Convention and the Protocol. **(Republic of Korea)**

59. Some central register is going to have to be kept at national level with some form of roll-up to international level. It is proposed that existing institutional mechanisms for trading and banking commodities should be investigated as the basis for tracking the creation, trading and banking of CERs and ERUs. This function may also be undertaken by national central banks or similar institutions. The same institution should be used for all mechanisms. For developing countries this would typically only apply to the CDM. However, developed nations would also need to include ERUs developed under Articles 6 and 17. **(South Africa)**

60. A mechanism needs to be put in place to determine who holds valid ERUs at any one time, both to track the performance of the mechanism and to define compliance with such targets as Kyoto Protocol targets. This entity may be a national central bank or similar organization. For developing countries this would typically only apply to the CDM, but developed countries would also need to include ERUs developed under Articles 6 and 17. Reporting should be undertaken in the national communication as well as the entity managing trades etc. **(South Africa)**

- - - - -

FCCC/SB/1999/9

Readex
Fiche

UNITED NATIONS

Framework Convention on Climate Change

Distr.
GENERAL

FCCC/SB/1999/9
4 October 1999

Original: ENGLISH

SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE
Eleventh session
Bonn, 25 October - 5 November 1999
Item 3 of the provisional agenda

SUBSIDIARY BODY FOR IMPLEMENTATION
Eleventh session
Bonn, 25 October - 5 November 1999
Item 3 of the provisional agenda

IMPLEMENTATION OF ARTICLE 4, PARAGRAPHS 8 AND 9, OF THE CONVENTION (DECISION 3/CP.3 AND ARTICLE 2, PARAGRAPH 3, AND ARTICLE 3, PARAGRAPH 14, OF THE KYOTO PROTOCOL)

Report on the workshop envisaged in the annex (Programme of work) to decision 5/CP.4

Note by the Chairman of the SBSTA

CONTENTS

		Paragraphs	Page
I.	MANDATE	1	3
II.	SCOPE	2 - 3	3
III.	WORKSHOP SUMMARY	4 - 18	3
	A. Information	4 - 6	3
	B. Specific needs, concerns and special situations	7 - 10	4

GE.99-66265

		Paragraphs	Page
C.	Addressing information gaps to support actions	11 - 13	5
D.	Views on preliminary actions	14 - 18	5

Annex

Agenda for the workshop envisaged in the annex (Programme of work) to decision 5/CP.4: Implementation of Article 4, paragraphs 8 and 9, of the Convention (decision 3/CP.3 and Articles 2.3 and 3.14 of the Kyoto Protocol) 8

I. MANDATE

1. The Conference of the Parties, at its fourth session, agreed upon the programme of work set out in the annex to decision 5/CP.4, including the organization of an expert workshop. Under the guidance of Mr. Kok Kee Chow, the Chairman of the Subsidiary Body for Scientific and Technological Advice (SBSTA), assisted by Mr. Mohammad Reza Salamat, the Vice-Chairman of the Subsidiary Body for Implementation (SBI), this workshop was held from Tuesday, 21 September 1999 to Friday, 24 September 1999 at Bonn, in accordance with the terms of reference adopted by the SBSTA, at its tenth session (FCCC/SBSTA/1999/6, para. 80).

II. SCOPE

2. This document is intended to respond to the requirements of the work programme set out in decision 5/CP.4, in accordance with which the subsidiary bodies are to consider the outcome of the workshop and prepare a report including conclusions and/or a draft decision for COP 5, which would identify initial actions to address the implementation of Article 4.8 and 4.9 of the Convention, as well as Articles 2.3 and 3.14 of the Kyoto Protocol.

3. The workshop included expert presentations followed by panel discussions in which the policy-related implications of the information presented were addressed. The agenda for the workshop is included in the annex to this note.

III. WORKSHOP SUMMARY

A. Information

4. Information has been available and is being developed on the **adverse effects of climate change**. More information is needed on the nature and magnitude of the effects on countries subject to the circumstances laid out in Article 4.8 and 4.9 of the Convention. Work related to vulnerability and adaptation is still at an early stage.

5. Information gaps centre around uncertainties related to national and regional impacts and to reducing the vulnerability of natural ecosystems and semi-managed resources, as well as to potential consequences on livelihood security. There are differences in availability of data on, and in scientific understanding of, the various areas; for example, there is better understanding of small island countries and countries with low lying coastal areas than areas liable to drought and desertification. Similarly, there is much more information on water resources and agriculture than there is on food security and health. Gaps have also been identified on the interaction among different impacts, as well as on the assessment of effective adaptive strategies. It is difficult to establish with certainty the proportion of the impacts directly attributable to anthropogenic climate change.

6. Some participants felt that sufficient information was available on the **impact of the implementation of response measures** by Parties included in Annex I to the Convention (Annex I Parties). Some other participants felt that further information needed to be developed with regard to the nature and magnitude of the impact on countries subject to the circumstances laid out in Article 4.8 and 4.9 of the Convention. Some gaps also remain in the assessment of the social, economic and environmental impacts of the implementation of response measures, particularly in relation to uncertainties in determining the baselines.

B. Specific needs, concerns and special situations

7. Developing countries would be affected by the **adverse effects of climate change** in different ways, depending on their national circumstances, their economic conditions and their capacity for adaptation. The adverse effects of climate change will have an impact on the livelihood security of developing countries by affecting water resources, agriculture and food security, economic activities and health, and in particular the least developed countries, where widespread poverty limits the capacity for adaptation. Countries with areas prone to natural disasters and other climate-related risks, including small island countries and countries with low-lying coastal areas, will be more affected by the adverse effects of climate change.

8. The adverse effects of climate change would also lead to secondary effects on developing countries, and in particular on the least developed countries, which could damage the life-supporting capacity of natural systems and/or the sustainability of human habitation. Such effects might include the use of poorer quality sources of fresh water, abandonment of the rural economy, displacement of settlements and infrastructure, and the occurrence of epidemics.

9. Capacity-building related to institutions and human resources at the local, national and regional levels will need to be further developed to reduce vulnerability. Some Parties pointed out that assistance would be needed in this context. Developing countries, and particularly the least developed countries, have limited capacities for conducting research on the adverse effects of climate change and for vulnerability assessment. There is a need to move towards implementing integrated approaches, such as integrated coastal zone management, and further developing integrated assessment models, as well as identifying effective adaptation strategies and assessing how to integrate these into national development programmes.

10. The **impact of the implementation of response measures** will affect developing country Parties through changes in the terms of trade, changes in income levels, and shifts in international capital flows. In this context, an especially important sector is the international energy sector. Some participants pointed out that the models presented in the workshop showed that the oil producing developing countries may be the most adversely affected and would have to bear a disproportionate or abnormal burden. Other participants pointed out that there were disparities in the timing and magnitude of this potential impact, and that the models did not cover the range of possible response measures.

C. Addressing information gaps to support actions

11. Cooperative research on the **adverse effects of climate change** on developing countries subject to the circumstances laid out in Article 4.8 and 4.9 of the Convention is needed. In this regard, practical capacity-building measures are needed in developing countries. This research should cover the adverse effects on social and economic conditions, in particular, on water resources, agriculture, food security, economic activities and health, including in the least developed countries. The research should focus on the regional and national levels, should monitor changes in both vulnerability of ecosystems and effects of climate change, and should be integrated with an analysis of the level of certainty on the adverse effects of climate change. Research is also required to distinguish between effects due to climate change and those due to other natural phenomena or economic and social changes, as well as the extent to which climate change interacts with other natural phenomena and with socio-economic activities. More research on the potential changes in risks associated with climatic hazards such as drought, floods, and hurricanes is needed. This will also lead to information on what adaptation measures might be adopted in the most cost-effective manner and on what time-scale. Country-specific information on adaptation could be provided through national communications.

12. In addressing the **impact of the implementation of response measures**, efforts are needed to address the uncertainties in the information available on changes in patterns of trade, capital flows, availability and accessibility of new technologies, response measures undertaken by all Parties, and any influence of the Kyoto mechanisms. Modelling activities could help identify and refine our understanding of the key underlying assumptions. Country-specific information on the impact of existing policies and measures could be provided through national communications. Some participants felt that sufficient information was available to take initial actions, including actions related to funding, insurance and the transfer of technology. Other participants felt that significant uncertainties in baseline assumptions and model parameters remained, so approaches to addressing the impact of the implementation of response measures on developing country Parties would need to take into account these uncertainties.

13. More information is needed on actions related to funding, insurance and the transfer of technology to meet the needs and concerns arising from the adverse effects of climate change and/or the impact of the implementation of response measures.

D. Views on preliminary actions

14. It is recalled that the Convention has called upon the Parties to give full consideration to actions under the Convention to meet the specific needs and concerns of developing country Parties arising from the adverse effects of climate change, and the impact of the implementation of response measures. The Convention has singled out the least developed countries as a vulnerable group, and has requested the Parties to take full account of the specific needs and special situations of the least developed countries in their actions with regard to funding and transfer of technology.

(a) Initial actions addressing the adverse effects of climate change on water resources, agriculture and food security, economic activities and health, as well as on coastal zones, should focus on:

(i) Further developing methods for sensitivity, vulnerability and adaptation assessment, including through research and studies identified in section C above, and the information could be integrated in national communications;

(ii) Capacity-building in environmental management and conducting integrated assessment on areas identified in section C above;

(iii) Disseminating examples of useful strategies to reduce vulnerability;

(iv) Monitoring and systematic observation of climate change impacts in developing countries in order to facilitate timely adaptation; and

(v) Identifying adaptation measures and facilitating timely adaptation where near-term climate change impacts are well understood, and adaptation measures are feasible;

(b) Initial actions to address the impact of the implementation of response measures should focus on additional model development and assessment, including through studies identified in section C above. The information should be developed with experts from both developing and developed countries, as this will improve the models and lead to capacity-building, and the information could be integrated in national communications.

15. Some participants suggested that the policies and measures reported by Annex I Parties and the projected actions to implement the Kyoto Protocol should be examined in order to analyse potential impacts on the economies of oil producing countries and other developing countries under Article 4.8 and 4.9 of the Convention. In this context, it was also suggested that the subsidiary bodies should continue to examine information needed to minimize the adverse social, environmental and economic impacts of response measures by Annex I Parties on developing country Parties. This information should cover the following:

(a) Tax restructuring to reflect the carbon content of fuels, including measures to discourage the production of fossil fuels and nuclear energy;

(b) Compensation;

(c) Assistance to developing countries, including increasing investment, to help them diversify their economies.

Other participants stated that the uncertainties associated with the impact of the implementation of response measures are such that consideration of specific actions is at best premature. They noted that actions related to the impact of the implementation of response measures under the Kyoto Protocol would be considered at the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its first session (COP/MOP 1). These participants also pointed out that any consideration of information relating to the impact of the implementation of response measures should include examination of ways in which developing countries can adapt their economies. It should also include, *inter alia*, consideration of the potential positive effects of the implementation of response measures within the scope of the Convention and the Kyoto Protocol. The same participants recalled that compensation was not provided for under the Convention or the Kyoto Protocol.

16. Some participants stressed the need for the identification and analysis of initial actions to meet the specific needs and concerns of developing country Parties arising from the adverse effects of climate change and the impact of the implementation of response measures, including information on the possibility of using insurance and other appropriate mechanisms.

17. Some participants felt that the eleventh sessions of the subsidiary bodies should identify initial priority actions to implement Article 4.9 of the Convention. Such actions, with regard to funding and the transfer of technology, should take full account of the specific needs and special circumstances of the least developed countries. Other participants felt that it was necessary to first explore initial actions to implement Article 4.8 of the Convention.

18. Some participants suggested that workshops to address these issues could be organized by the secretariat as one option for taking the work forward. Some participants pointed out that there was no provision in the budget for 2000-2001 for such a workshop, and that in view of the possibility of other workshops being organized, a consolidated approach to the organization and timing of workshops needed to be taken.

Annex

Agenda for the workshop envisaged in the annex (Programme of work) to decision 5/CP.4 : Implementation of Article 4, paragraphs 8 and 9, of the Convention(decision 3/CP.3 and Articles 2.3 and 3.14 of the Kyoto Protocol)

21-24 September 1999
Beethovenhalle, Bonn, Germany

Day 1: Tuesday, 21 September 1999

Afternoon session

* Introduction and general overview.
  Chow Kok Kee, Chairman of the SBSTA
  Michael Zammit Cutajar, UNFCCC Executive Secretary

* Methodologies related to the adverse effects of climate change.
  Osvaldo Canziani, Co-Chairman, IPCC Working Group II
  Thomas Downing, Programme Leader, Environmental Change Unit, University of Oxford

* Impact of climate change on countries with arid and semi-arid areas, forested areas, and areas liable to forest decay; and countries with areas liable to drought and desertification.
  Dieudonné Goudou, National Environment Council, Niger
  Bubu Jallow, Department of Water Resources, Gambia
  Discussant: Massimo Candelori, UNCCD secretariat.

* Impact of climate change on countries with areas prone to natural disasters.
  Peter Walker, International Federation of Red Cross and Red Crescent Societies
  Max Campos, Comité Regional Recursos Hidraulicos, Costa Rica
  Atiq Rahman, Centre for Advanced Studies, Bangladesh

Day 2: Wednesday, 22 September 1999

Morning session

* Impact of climate change on countries with areas of high urban atmospheric pollution.
  Alexander Alusa, UNEP
  Discussant: Andrew Githeko, Kenya Medical Research Institute

* Impact of climate change on countries with low-lying coastal areas.
  Roger McLean, School of Geography and Oceanography, University of New South Wales, Australia
  Discussant: Manuel Dengo, SIDS

* Impact of climate change on small island countries.
  Graham Sem, Pacific Islands Climate Change Assistance Programme, Samoa
  Brian Challenger, Ministry of Public Utilities, Antigua and Barbuda
  Discussant: Clifford Mahlung, Meteorological Services, Jamaica

Afternoon session

* Impact of climate change on countries with areas with fragile ecosystems, including mountainous ecosystems.
  Martin Price, University of Oxford, UK
  Andrew Githeko, Kenya Medical Research Institute
  Discussant: Andreas Fischlin, Institute for Terrestial Ecology, Switzerland

* Consideration of the specific needs and special situations of the least developed countries, and land-locked and transit countries.
  Mustafa Babiker, MIT Joint Program on the Science and Policy of Global Change, USA
  Discussant: Bubu Jallow, Department of Water Resources, Gambia

* **Panel discussion**
  Discussants:
  Kiyotaka Akasaka, Deputy Director-General, Ministry of Foreign Affairs, Japan
  Mohamed Ould-el-Ghaouth, Counsellor, Ministry of Foreign Affairs, Mauritania
  Bernarditas Müller, Department of Foreign Affairs, Philippines
  Ole Ploughman, Deputy Permanent Undersecretary of State, Denmark

* Methodologies related to impacts of response measures.
  Bert Metz, Co-Chairman, IPCC Working Group III
  John Weyant, Stanford University, USA

Day 3: Thursday, 23 September 1999

Morning session

* Minimizing adverse effects of the implementation of response measures on international trade, and social, environmental and economic impacts on developing country Parties identified in Article 4.8 and 4.9 of the Convention.
  Warwick McKibbin, Australian National University
  Houshang Shojania, National Iranian Oil Company

Discussants:
Prodipto Ghosh, Asian Development Bank
John Weyant, Stanford University, USA

* Minimizing adverse effects of the implementation of response measures on countries whose economies are highly dependent on income generated from the production, processing and export, and/or on consumption of fossil fuels and associated energy-intensive products.
Davoud Ghasemzadeh, OPEC
Jonathan Pershing, IEA
Thomas Rutherford, University of Colorado, USA
Discussants:
Mustafa Babiker, MIT Joint Program on the Science and Policy of Global Change, USA
Brian Flannery, Exxon Corporation
Prodipto Ghosh, Asian Development Bank

Afternoon session

* ***(continuation of morning session)***

* **Panel discussion**
Discussants:
Evelyn Bravo, Ministry of Energy and Mines, Venezuela
Jos Delbeke, European Commission, European Community
Brian Fisher, Bureau of Agricultural and Resource Economics, Australia
Mohammad al-Sabban, Ministry of Petroleum and Mineral Resources, Saudi Arabia

Day 4: Friday, 24 September 1999

* Conclusions.

- - - - -